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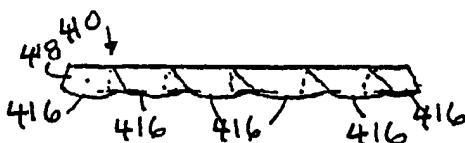
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(54) Title: FLYING DISCS AND DISC ACTIVITIES



(57) Abstract: An object of manufacture with a primary piece of ma-
terial (120), a disc body (412) contained within and separable from the
primary piece of material (120), an outer perimeter of the disc body (412)
marked on the primary piece of material (120) and with spaced-apart lines
(414) marked for indicating cuts to be made to form separate portions
(416) between each pair of adjacent cuts which are foldable to facilitate
flight of the disc body, and, in one aspect, each separate portion (416)

having sides overlapping sides of adjacent separate portions; a method for players to engage in an activity using at least one disc
(440) with identifying indicia (441); discs for such activities; flying discs (440); and flying discs (300) with one or more computer
disc (301) thereon. Figure 45c shows portions (416) folded down in scalloped arrangement around the outer perimeter of the disc
body (412).

FLYING DISCS AND DISC ACTIVITIES

The present invention discloses, in at least certain embodiments, a method for engaging in an activity, the activity to be engaged in by a plurality of players, each player provided with at least one disc with identifying indicia, the method including each player throwing at least one disc at a target, each disc having identifying indicia for identifying the player throwing said disc, and scoring for each player based on a final resting location of said at least one disc. In one aspect in such a method the plurality of players are divided into at least two opposed teams and, optionally, each team alternates on offense and defense, a team on offense attempting to score and a team on defense attempting to prevent the other team from scoring. A score may be achieved for a disc that hits the target. The target may be a container and the players attempt to throw the at least one disc into the container. The at least one disc may be a plurality of discs and, optionally, a player may be allowed to retrieve a disc that fails to hit the target and again throw said disc at the target.

In certain aspects, the present invention discloses a method for engaging in an activity, the activity to be engaged in by at least two players or teams, the players, optionally, divided into a first team and a second team each team with at least one player, the first team provided with at least one disc, the method including at least one player of the first team throwing the at least one disc at a player of the second team; and, optionally, at least one player of the second team having at least one disc and throwing it at a player of the first team. Such a disc may have, according to the present invention, a soft rim or the entire disc may be soft.

In one embodiment the present invention discloses a series of devices of different colors and/or with different indicia (e.g. letters, symbols, or numbers thereon). In one method according to this invention for using such devices an item, a treat or food item is placed in only one of the devices and an animal (or person) is asked to retrieve that device according to its indicia from among a plurality of devices.

The present invention, in certain embodiments discloses a flying disc made from cardboard, plastic or similar material which is sufficiently rigid so that a disc body of the material will remain flat or substantially flat in flight. In certain aspects the disc is generally square, rectangular, triangular, pentagonal, quadragonal, hexagonal, septagonal, octagonal, oval,

or circular as viewed from above, but it may have any shape which serves as the body for the flying disc. In certain aspects, a portion or portions around the disc periphery are bent down. In one aspect these portions extend continuously completely around the discs perimeter. These portions may be bent down and not be in contact with, not be interconnected or interlocked with adjacent portions; or, alternatively, these portions may contact each other, be taped together, be interconnected, and/or be interlocked with each other.

In one aspect such a disc is made by cutting out or punching out a disc piece of plastic, fiberboard, kraft paper, cardboard, etc. with the desired shape from a larger piece thereof. Slits, weakened areas, grooves, indentations, and/or cuts are then made around the discs perimeter (or this may be done before the disc piece is cut or punched out from the larger piece of material). A portion or portions of the disc (one, two, three, four, five, six, seven, eight, nine, ten, eleven, twelve, or more) between pairs of slits, etc. are then folded down. Alternatively, weakened or slit lines on top of the disc around its circumference provide a line down from which a part of the disc body can be bent or folded to provide the portion or portions projecting down from the disc body to facilitate its flight. In one particular aspect this produces an intermittent lip around the disc perimeter that facilitates the flight of the disc (as compared to a flat piece of material with no such lip or portions).

In one embodiment two (or more) discs are connected together. In one such multi-disc assembly, two such discs are connected face-to-face so that the slits or cuts in the downward projecting edge of one disc are offset from those of the other disc. In another aspect a first disc with the intermittent lip of folded-down portions is connected to and on top of a disc (or discs) with no such portions.

In another embodiment a secondary piece of material, is connected face-to-face, on top of or beneath, a disc as described above. Such a secondary piece adds weight to the disc and facilitates its flight with the lip of the disc on the lower side of the disc in flight. Alternatively any weight or weights may be connected to a disc to facilitate its flight.

In one particular embodiment the cardboard used to produce a disc according to the present invention is cut out of a box, as may be the secondary piece, or multiple discs of a multi-disc disc.

The present invention discloses, in at least certain embodiments, a play activity set with target apparatus or device(s) at which at least one object may be directed, at least one object for throwing at the target means, and the target apparatus or device(s) and the at least one object made by separating box material from at least one box. In one aspect, a single box is used for target(s) and throwing object(s); and, in one particular aspect, the box (or boxes) is a pizza box.

The present invention, in certain aspects, discloses boxes for games and activities. The boxes are used as the source material for game pieces, game equipment, activity items, targets, and things used in such games and activities. In certain aspects everything needed for a game or for an activity is made from a box or boxes. In certain aspects, everything needed for such a game or activity is made from a single box. In certain specific aspects the box (or boxes) is a pizza box or a breakfast cereal box.

In one embodiment a first part of a box is separated or removed from the box (severed, cut, punched out, and/or pushed out from perforated, indented or weakened areas) and then folded back and passed through an opening in the box so that the first part projects out from the box. The box is then placed flat with the first part projecting upward or the box is placed on a side with the first part projecting outward. One or more pieces of the box are then cut out from the remainder of the box and an opening is provided through the piece(s) so that it can be thrown in an effort to have the opening receive the first part; i.e., so that the piece ends up on, around, or over the first part encompassing it. In one particular aspect several throwing pieces are cut from the box. In another aspect additional parts like the first part are cut from the box and folded and positioned to provide several projecting parts at which the throwing pieces may be directed. The throwing pieces may have any suitable shape as viewed from above (e.g., but not limited to, square, rectangular, round, oval, triangular, pentagonal, hexagonal, irregular, etc.) and the openings through the throwing pieces may also be any suitable shape - either a shape corresponding to the shape of the throwing piece or not. In other aspects, the throwing pieces are made from a single thickness of a box; and in some aspects throwing pieces are made from two or more thicknesses of a box.

In another embodiment, a portion of the box is separated from the box to provide a target opening for items thrown at the box. An object or objects for throwing at the box may be made

from the box itself, from another box, or other object(s) may be used. In one aspect a flyer disc as disclosed herein is made from a box and then thrown at the target opening of a box. In another aspect, a plurality of flat discs or objects of non-round shape are made from the box from which the target opening was taken and these discs or objects are then thrown at the target opening. In one aspect, one or more parts of the box are totally or partially separated from the box, folded, and then an end thereof is inserted into one or more openings, slots, slits, or cuts in the box to stabilize the remainder of the box with the target opening. One, two, or more target openings may be provided in a single box - with multiple openings on one side of a box or with openings on two, three or more sides of a box. In one particular aspect corresponding openings are provided on two sides of a box, e.g., but not limited to, on two sides of a pizza box so that an object can be thrown so that it goes through both openings. In other aspects a box with a target opening is positioned or is laid flat so that thrown objects that pass through the target opening enter the box and remain there.

In other aspects, one or more knock-down items, in one embodiment in the general outline shape of bowling pins, are made from a box or boxes and, optionally, an object to throw or roll at them to knock them down is also made from the same box or boxes or from another box. By using multiple discs separated from a box or boxes and then meshed together using slots in each disc, a generally spherical object is made that will roll when thrown along a floor or other surface. In another aspect a cubical throwing item (or items) is made from a box or boxes.

In one particular aspect a set of dominoes or checkers is printed on the box or a paper with a set of dominoes or checkers printed thereon is glued or attached to the box. The dominoes or checkers are then separated from the box to provide a set of dominoes for playing domino games or checkers for playing a checkers game. In one aspect, a checkerboard may be printed on a box or on a sheet of paper glued to the box. Checkers may be played on such a checkerboard that remains on the box or the checkerboard may be separated from the box. A checkerboard may be made on one box and the checkers separated from another box or both may be made from a single box. In a particular aspect of the present invention, game pieces such as dominoes, chess pieces, or checkers are printed on one surface of a part of a box and,

optionally, a logo, trademark, tradename, symbol, word(s), motto, or other indicia are printed on a reverse surface so that when the game pieces are separated from the box each has the logo, etc. on one side and the game indicia on the other. For game pieces such as checkers, the logo, etc. may be provided on both sides or on only one side.

The present invention discloses, in at least certain aspects, a flying disc with a disc body and a computer disc releasably connected to the disc body.

Description Of The Drawings

A more particular description of embodiments of the invention briefly summarized above may be had by references to the embodiments which are shown in the drawings which form a part of this specification.

Fig. 1A is a side view of a flying disc according to the present invention. Fig. 1B is a top view and Fig. 1C is a bottom view of the disc Fig. 1A. Fig. 1D is a crosssection view of the disc of Fig. 1A.

Fig. 2A is a side view of a flying disc according to the present invention. Fig. 2B - 2E are bottom view of discs as in Fig. 2A.

Fig. 3A is a side cross-section view of a flying disc according to the present invention. Fig. 3B is an exploded view of the disc of Fig. 3A. Fig. 3C is a top view, and Fig. 3D is a bottom view of the disc of Fig. 3A.

Fig. 4 is a top view of a plurality of flying discs according to the present invention.

Fig. 5A is a perspective view of a target according to the present invention. Fig. 5B is a side view of the target of Fig. 5A.

Fig. 6A is a top view of a box for making a target according to the present invention. Fig. 6B is a side view of the target of Fig. 6A.

Fig. 7A is a top view of a pattern for a box part for making throwing objects according to the present invention. Fig. 7B is a top view of a plurality of throwing objects made with the pattern of Fig. 7A.

Fig. 8 is a schematic view of an arrangement for engaging in activity according to the present invention.

Fig. 9 is a top view of discs according to the present invention.

Fig. 10 is a top view of discs according to the present invention.

Fig. 11 is a front view of targets according to the present invention.

Fig. 12 is a front view of targets according to the present invention.

Fig. 13A is a side view of a flying disc according to the present invention. Fig. 13B is a crosssection view of the disc of Fig. 13A. Fig. 13C is a side view of part of the disc of Fig. 13A. Fig. 13D is a crosssection view of the part of the disc of Fig. 13C.

Fig. 14 is a perspective view of a disc according to the present invention.

Fig. 15 is a side view of a disc according to the present invention.

Fig. 16A is a crosssection view of a disc according to the present invention. Fig. 16B is a top view of the disc of Fig. 16A. Fig. 16C is a side crosssection view of part of the disc of Fig. 16A. Fig. 16D is a crosssection view of a weight for a disc like the disc of Fig. 16A.

Fig. 17 is a schematic view of an arrangement for engaging in activity according to the present invention.

Fig. 18 is a schematic view of an arrangement for engaging in activity according to the present invention.

Fig. 19A is a top view of a flying disc with a computer disc according to the present invention. Fig. 19B is a bottom view of the disc of Fig. 19A. Fig. 19C is a side view of the disc of Fig. 19A. Fig. 19D is a bottom view of a flying disc according to the present invention.

Fig. 20 is a side cross-section view of a flying disc according to the present invention.

Fig. 21A is a side cross-section view of a flying disc according to the present invention.

Fig. 21B is a bottom view of the disc of Fig. 21A.

Figs. 22 - 25 are side cross-section views of flying discs according to the present invention.

Fig. 26A is a top view of a line pattern for making throwing objects according to the present invention. Fig. 26B is a top view of throwing objects made according to the pattern of Fig. 26A.

Fig. 27A is a top view of a box for making a target according to the present invention. Fig. 27B is a perspective view of a target according to the present invention made from the box

of Fig. 27A.

Fig. 28A is a top view of a box for making a target according to the present invention. Fig. 28B - 28D are perspective views of a target made with the box of Fig. 28A.

Fig. 29A - 29D are top views of boxes for making targets and/or throwing objects according to the present invention.

Figs. 30A, 30B, and 30C are top views of parts of a knock-down item according to the present invention. Fig. 30D shows a knock-down item according to the present invention.

Figs. 31A and 31B are top views of parts of a knock-down item according to the present invention. Fig. 31C shows a knock-down item according to the present invention.

Fig. 32A is a top view of a box for making a target according to the present invention. Fig. 32B is a perspective view of a target according to the present invention made from the box of Fig. 32A. Fig. 32C is a top view of a throwing object cut from the box of Fig. 32A.

Fig. 33A is a top view of a box for making a target according to the present invention. Fig. 33B shows a set of knock-down pins and a throwing object made from the box of Fig. 33A. Fig. 33C is a top view of the throwing object shown in Fig. 33B. Fig. 33D is a perspective view of a throwing object made from part of the box of Fig. 33A. Fig. 33E is a side view showing two parts made from the box of Fig. 33A prior to meshing of the two parts.

Fig. 34A is a top view of a box part according to the present invention with game pieces (dominoes) printed thereon. Fig. 34B is a top view of a reverse side of the box part shown in Fig. 34A. Fig. 34C shows dominoes made from the box part of Fig. 34A. Fig. 34D shows both sides of a domino according to the present invention.

Fig. 35A is a top view of an opened box according to the present invention. Fig. 35B is a top view of the box of Fig. 35A closed.

Fig. 36A is a top view of an open box according to the present invention. Fig. 36B is a side view of part of the box of Fig. 36A. Fig. 36C is a top view of parts of the box of Fig. 36A. Fig. 36D is a top view of the box of Fig. 36A closed.

Fig. 37A is a top view of an open box according to the present invention. Fig. 37B is a top view of an open box according to the present invention. Fig. 37C is a top view showing the box of Fig. 37B closed. Fig. 37D is a side view of a target according to the present

invention made from a box.

Fig. 38 is a top view of an open box according to the present invention.

Fig. 39A is a top view of a box for making a target according to the present invention.

Fig. 39B is a side view of the target of Fig. 39A.

Fig. 40A is a top view of a box for making a target according to the present invention.

Fig. 40B is a perspective view of a target made from the box of Fig. 40A.

Fig. 41A is a partial view of a box for making a target according to the present invention. Fig. 41B is a perspective view of a target made from the box of Fig. 41A.

Fig. 42A is a top view of a line pattern for making throwing objects according to the present invention. Fig. 42B is a top view of throwing objects made according to the pattern of Fig. 42A.

Fig. 43A is a top view of a line pattern for making throwing objects according to the present invention. Fig. 43B is a top view of throwing objects made according to the pattern of Fig. 43A.

Fig. 44 is a top view of a flying disc according to the present invention.

Fig. 45A is a top plan view of a flying disc according to the present invention. Fig. 45B is a side view of the disc of Fig. 45A. Fig. 45C is a side view of the disc of Fig. 45A with portions folded down.

Fig. 46A is a top plan view of a flying disc according to the present invention. Fig. 46B is a side view of the disc of Fig. 46A. Fig. 46C is a side view of the disc of Fig. 46A with portions folded down.

Fig. 47A is a top plan view of a flying disc according to the present invention. Fig. 47B is a top plan view of a secondary piece for a multi-part disc according to the present invention. Fig. 47C is a side view of a multi-part disc according to the present invention with the flying disc of Fig. 47A and secondary piece of Fig. 47B.

Fig. 48A is a perspective view of a flying disc according to the present invention showing the top of the box. Fig. 48B is a side view of the disc of Fig. 48A.

Fig. 49 is a top plan view of a flying disc according to the present invention.

Fig. 50 is a top plan view of a flying disc according to the present invention.

Figs. 51A - 51E are a top plan views of a flying discs according to the present invention.

Fig. 52 is a bottom view of a flying disc according to the present invention.

Fig. 53A is a side view of a flying disc container system according to the present invention. Fig. 53B is a side view of a flying disc of the system of Fig. 53A.

Fig. 54A is a top view of a flying disc according to the present invention. Figs. 54B and 54C are side views of the flying disc of Fig. 54A.

Figs. 55A - 55D are side views in cross-section of flying disc systems according to the present invention.

Fig. 56A is a perspective view of a box according to the present invention showing the top of the box. Fig. 56B is a perspective view of a box of Fig. 56A open with parts removed. Fig. 56C is a plan view of the box of Fig. 56A unfolded and flat. Fig. 56D is a top view of a disc and a secondary piece removed from the box of Fig. 56A.

Fig. 57 is a side view in cross-section of a flying disc container according to the present invention.

Fig. 58 is a side view in cross-section of a flying disc container according to the present invention.

Figs. 59A and 59B are side views of flying discs according to the present invention.

Figs. 60A, 60B, 61A, and 61B are top views of flying discs or flyers according to the present invention.

Description Of Certain Embodiments

Figs. 1A - 1D show a throwing plate 1 according to the present invention with a body 2. The body 2 is made of material sufficiently flexible and resilient so that an item may be inserted through and releasably held in slitted portions 3, 4, and 5. Any number of such slitted portions may be used positioned anywhere on the body 2, including in the top, bottom and/or side thereof.

Figs. 2A and 2B show a flying disc 6 according to the present invention which, as shown in Fig. 2B, bears the numeral "10" on its underside. Figs. 2C - 2E show additional discs 8a, 8b, and 8c like the disc 6, but with different numerals. A plurality of discs such as those

disclosed in Figs. 2B - 2E may be used, in one aspect according to the present invention, in a game in which one, two, or more persons (or a throwing apparatus) throw the discs at, (either simultaneously, randomly, or sequentially) to, or near one, two, three, four or more persons (players). The person or persons at whom the discs are thrown score points equal to the numeral on a disc they catch and/or for a disc they retrieve and/or acquire whether they catch it in the air or not. A game can be won in several ways: a player catches, retrieves, and/or acquires a sufficient number of discs to accumulate a pre-set point total; a player catches, acquires, and/or retrieves a disc with each different numeral; a player catches/retrieves a set number of discs whose point values are in sequence; and/or a player catches, acquires, and/or retrieves a set number or a particular set of discs which then qualifies the player to proceed from the area to which the discs are being thrown to a pre-set base or goal, and whichever player first achieves the base or goal is the winner. Alternatively, the players not only get points for disc catching acquisition and/or retrieval, they also earn points by then themselves throwing the discs at or into certain containers, goals, bases, or targets and score more points for their accuracy in such throwing. Any suitable scoring indicia (e.g., color, symbol, word, number) may be used on the discs and any disc disclosed herein may have the indicia for use in a game according to the present invention. It is also within the scope of the present invention for players to be associated in teams (two, three, four, or more teams) for any game according to the present invention.

Figs. 3A - 3D show a flying disc 380 according to the present invention with a disc body 382 having a top 384 and a bottom 386. An amount 381 of releasably-cooperating or hook-and-loop fastener material is on the bottom 386 of the disc 380. Releasably secured to the material 381 is a patch 385 (e.g. of cloth, plastic cardboard paper, or other suitable material) 385 which has on its upper surface a corresponding amount of releasably cooperating or hook-and-loop fastener material 383 [including, but not limited to, VELCRO (TM) material]. As shown in Fig. 3D, the patch 385 has the numeral "20" on it. Fig. 3E illustrates a plurality of patches 388, 389 (like the patch 385) and 385 with different numerals on them. Patches shown have a generally circular shape, but may be any desirable shape. A plurality of discs like the disc 380 with patches like the patch 385 may be used in any of the methods or games described herein.

Fig. 4 illustrates a plurality of flying discs 440 many of which have a specific identifying indicia 441 (triangle, square, hexagon or question mark) and some of, optionally, are "dummy" discs with no identifying indicia. Any indicia disclosed herein may be used anywhere on the disc bodies. Any game or activity disclosed herein may be played with the discs 440. In one aspect, one or more persons [individuals or on team(s)] throw the discs 440 (simultaneously, sequentially or randomly) to one or more persons [individuals or on team(s)]. In one aspect a player wins by catching and/or retrieving a set of the discs, i.e., one disc with each different indicia and/or all discs with one particular indicia, e.g. all discs with triangle indicia. A player retrieving a disc that does not help that player achieve a desired set throws that disc away, in one aspect anywhere in a pre-agreed area or field of play, for other players to retrieve. Any particular indicia, e.g. those discs with a question mark indicia, may, optionally, be a "wild card" disc that may be used as a disc of any desired indicia to complete a desired set. Once a set is achieved a play wins; or, as described above for other games and activities, a player who accumulates a desired set may, to win, be required to get to a base, goal, etc. The dummy discs may be used as useless decoys of no point or set value. Such dummy discs (one or more) may be provided for any game or activity disclosed herein. The indicia may be provided on patches by providing the discs with one or more removable patches as described above.

In any game or activity described herein in which a group of players or team accumulates a pre-determined score and/or a pre-determined number of discs or indicia-bearing members and/or a pre-determined set of discs or indicia-bearing members, the team can choose, in certain aspects, one player (or some designated players) to hold the discs or indicia-bearing members as they are accumulated during the game or activity (or to have these items releasably attached to the designated player's clothing, garment, belt, hat, strap, shoe, band, or apparel, etc). The identity of the designated player (or in one aspect two or more designated players) may be revealed at the start of the game or at some pre-set point during the game. Alternatively, the identity of the player(s) may be kept secret until the pre-determined score, number of indicia-bearing members, or set is achieved; or until the player(s) attempt to move to a pre-determined base, goal, or target to "win" the game or activity. In one aspect a player or players may, in any such game or activity according to the present invention, attempt to take from an opposing

player (who has qualified to move to a base, goal or target) a disc or discs or an indicia-bearing member so that player no longer is qualified to advance to the base, goal or target.

In any game or activity according to the present invention a pre-determined time limit may be imposed on a player or players for achieving a pre-determined score and/or for retrieving a pre-determined disc or plurality of discs.

Any patch or other indicia-bearing member disclosed herein may be releasably attached to a flying disc with well-known snap apparatus or with the well-known press-fit pop-free apparatus used to releasably attach plastic "flags" to belts used in flag football. In one particular aspect a flying disc itself has the press-fit pop-free apparatus and the disc itself, once retrieved, is releasably attached to a belt or garment with corresponding apparatus (e.g. but not limited to the well-known flag football belt with corresponding apparatus).

In any game or activity according to the present invention in which a score is accorded a person or team for retrieving a disc, a higher score may be awarded for retrieving a disc in flight as opposed to a disc which has touched the floor, ground or water.

The present invention, therefore, provides in certain, but not necessarily all embodiments, a method for at least one first person to interact with at least one second person, the method including the at least one first person throwing a plurality of flying discs, each of the plurality of flying discs bearing identifying indicia, and the at least one second person retrieving at least one of the plurality of flying discs. Such a method may have one, some, or all of the following: wherein the at least one second person is a plurality of second persons; the plurality of second persons competing with each other to retrieve flying discs thrown by the at least one first person; wherein the plurality of second persons comprises at least two separate competing teams, each team including a plurality of persons; wherein the at least one first person is a plurality of first persons; wherein the plurality of first persons comprises a first team and a plurality of second persons comprises a second team; wherein a time taken by the at least one second person to retrieve some, all or at least one of the plurality of flying discs is measured as a time score for the at least one second person; wherein the at least one second person is a plurality of second persons and each of the plurality of second persons who retrieves some, all or at least one of the plurality of flying discs receives a time score corresponding to the time taken to retrieve said

disc and/or a numerical score corresponding to numerical indicia on the discs retrieved; wherein the first team throws the plurality of flying discs to the second team and time taken by the second team to retrieve some, one, or at least a portion of the plurality of flying discs is measured and is a time score for the second team and/or numerical score corresponding to numerical indicia on the discs retrieved; wherein the second team then throws a plurality of flying discs to the first team and time taken by the first team to retrieve at least a portion of the plurality of flying discs is measured and is a time score for the first team and/or the first team receives a numerical score corresponding to numerical indicia on retrieved discs; wherein a pre-determined numerical score is to be achieved by a winning team or a pre-determined set of flying discs is to be retrieved by a winning team and the method further comprising the at least one first person throws the plurality of flying discs to at least two separate competing teams, each of the at least two separate competing teams attempt to retrieve flying discs, and the separate competing team that first achieves the pre-determined numerical score or acquires the pre-determined set of flying-discs is the winner; wherein for a separate competing team to be declared the team winner, at least one member of said team becomes a designated member and must have flying discs indicative of the pre-determined numerical score or the pre-determined set of flying discs and said member must move to a pre-selected base with said discs or said patches; wherein a member of an opposing team may attempt to remove at least one of said discs or said patches from said designated member; wherein at least one disc of the plurality of flying discs bears its indicia by bearing an indicia-bearing member releasably attached to the at least one disc; wherein the at least one second person wears a garment (hat, strap, clothing, belt, apparel etc.) and the indicia-bearing member is releasably attachable to the garment; wherein at least one of the plurality of flying discs is releasably attachable to a garment worn by the at least one second persons; wherein the at least one second person receives a score for retrieving at least one of the plurality of flying discs; and/or for any activity or game according to the present invention wherein a score is higher for retrieving a thrown flying disc in flight as opposed to a disc which after throwing touches ground or water before being caught or retrieved.

Figs. 5A and 5B show an upstanding target 180 made from a box with (at least) two

opposed sides 181, 182 connected together with a box part 187. A target opening 183 is removed or cut from the side 181. A strip 184 is cut from the side 182 and an end 185 of the strip 184 is inserted through an opening, slot or slit 186. The end 185 may be turned down or twisted to maintain the strip 184 in place. The sides 181, 182 and box part 187 may be of any suitable box material, including, but not limited to cardboard, paperboard, fiberboard, foamboard, craft paper, and manila paper — as may be any box or box part disclosed herein. Alternatively (as may be the case with any box or target disclosed herein), openings may be made in opposed box sides and a piece (or pieces) of box material may be used that passes through each opening. Such a piece of box material is completely separated from a box and is then passed through openings in each of the opposed box sides.

The strip 184 is shown generally centrally located, but it is within the scope of this invention to locate it at any suitable place on the side 182 and/or to use two, three or more such strips. It is also within the scope of this invention to cut one or more such strips from the side 181 and have its (or their) end inserted through a slit, etc. in the side 182. The strip(s) 184 may be any desired length and the target opening 183 may be any desired shape and size (as may be the case with any opening and target disclosed herein). It is within the scope of this invention to provide a box side with two, three, four or more target openings and to provide segmented openings (as may be the case with any opening and target disclosed herein).

Figs. 6A and 6B show a target 200 according to the present invention made from box 209 which has three strips 204a, 204b, 204c cut or removed therefrom (with one end remaining integral with the box 209). As shown in Fig. 6B the target 200 is upright with an end portion of each of the strips 204a, 204b, 204c projecting through corresponding openings 206a, 206b, 206c. These projecting end portions provide a projecting target about which a thrown object with a hole therethrough can land, with the hole sufficiently large that the thrown object (which may be any shape disclosed herein as viewed from above with a hole of any shape disclosed herein as viewed from above) can, upon coming to a stop, encompass the projecting end portion of one of the strips 204a, 204b, 204c. It is within the scope of this invention to delete any one or two of the strips 204a, 204b, 204c or to add one, two, three or more such additional strips. Optionally strips may be designated with scoring indicia, e.g. as the strips are designated with

"10" "20" and "30" points in Fig. 20A. Sides 209a, 209b of the box 209 are folded together so the target 200 can stand upright as shown in Fig. 6B.

Fig. 7A shows a line pattern and scoring indicia indicators (different value domino symbols) for making a plurality of throwing objects (in one embodiment as shown round objects) from part of a box. As shown in Fig. 7B, by severing or cutting a box along lines 271a and 271b (Fig. 7A) throwing objects 272 and 273 are made. Any suitable scoring indicia may be used, including, but not limited to, colors, words, numerals, symbols, or a combination thereof; and the objects may be any desired shape (including any shape referred to herein). Also, the objects may have a thickness of one part of a box or multiple thicknesses may be used (e.g. attached together with glue, tape, staples, and/or interfitting parts).

One method for playing a game according to the present invention pits multiple teams (two, three, four, or more teams) of players against each other. Each team attempts to throw plates, discs, flying discs, flat and/or cardboard items to a target and/or target container. The plates, etc. of each team are identified by an identifying team color, symbol, name, etc. and/or are each marked with a scoring indicator, e.g., but not limited to, a numerical value. Fig. 8 shows such a method in which three teams attempt to throw plates, etc. into a target container 7.

As shown in Fig. 8, there are three team, teams A, B, and C. Each member of team A (players P1 and P2), team B (players P3 and P4) and team C (players P5 and P6) has 1 to 10 (or more) throwing items, e.g., but not limited to, discs or flying discs. In one aspect all of a team's items (e.g. discs) are of the same color and/or each team member wears a team identifier [e.g. a belt, shirt, shoes, pants, and/or hat; e.g. of the same color as the team's items (e.g. discs)]. The items (e.g. discs) may each have a scoring indicator thereon which corresponds to a scoring or point value for the items (e.g. discs), e.g., but not limited to, numerical values.

In one particular aspect each team has ten flying discs, with values from 10 to 100 in increments of 10. Points are scored by throwing a disc into the target container 7. For example, in one game team A's players successfully throw flying discs with point values 20, 30, 70 and 100 into the target container 7. Team B succeeds in throwing discs with values 10, 40, 60 and 90 into the target container and team C gets discs with values 30, 50, 70, 80 and 100

into the container. Team scores for this game are: Team A - 220 points; Team B - 200 points; Team C - 230 points. Team C wins. Alternatively, once all discs have been thrown once, any disc that did not enter the container (or hit the target) may be retrieved and a second round of throwing ensues.

Throwing round(s) or period(s) can be timed so that, e.g., upon the expiration of a set time period, e.g. thirty or sixty seconds, no more throwing is allowed. It is within the scope of this invention for this game (as is the case for any team game or activity according to the present invention) that two, three, four or more teams may compete. Also for any team game according to the present invention any one or more teams may be on defense [trying to prevent other team(s) from scoring] and any one or more teams may be on offense. For any such game any throwing items or discs disclosed or referred to herein may be used. Also, instead of teams, any such game may be played by two or more individual players. In one aspect all players are located equidistant from a target or target container for throwing items in any attempt to score.

Instead of a target or container 7, a goal like a soccer goal or basket ball goal may be used and, optionally, players and/or teams seeking to score may be arrayed in front of (i.e., all on one side of) the goal. Optionally, one player or team may be positioned to defend the goal to try to stop thrown items or discs from scoring. Optionally, if a defender catches an item or disc in the air, the player or the player's team can score. Player(s) and or team(s) can alternate on offense and defense.

A set 12 of throwing discs shown in Fig. 9 (which may be flying discs, flat discs, any disc according to the present invention, any disc referred to or disclosed herein) includes discs 21, 22, 23 each, respectively with openings 24, 25, 26 therethrough, and each, optionally, with a scoring value indicated thereon; in this case 10, 20 or 100 points. It is within the scope of this invention to have two or more than three discs like the discs 21 - 23. A set 12 (or two or more than three) of such discs may be used in any suitable game or activity referred to or disclosed herein).

A set 14 of throwing discs shown in Fig. 10 (which may be flying discs, flat discs, any disc according to the present invention, any disc referred to or disclosed herein) includes discs 31, 32, 33 each, respectively with openings 34, 35, 36 therethrough of different size, and each,

optionally, with a scoring value indicated thereon; in this case 10, 50 or 100 points. It is within the scope of this invention to have two or more than three discs like the discs 31 - 33. A set 14 (or two or more than three) of such discs may be used in any suitable game or activity referred to or disclosed herein).

Fig. 11 shows a series of targets or containers 16 according to the present invention that includes targets 41, 42, 43 each, respectively, with an opening 44, 45, 46, each of different size, for receiving and/or through which an item or disc is to be thrown to score in a game or activity according to the present invention. Optionally, each target 41 - 43 may have a scoring value (values 1, 5 and 10 shown) so that an item or disc passing therethrough or thereinto merits that score (and, in one aspect, a score value on the item thrown is multiplied by the numeric value on the target). Higher scores may be awarded for targets with smaller openings. It is within the scope of this invention to have two or more than three targets 41 - 43. A set 16 (or two or more than three such targets) may be used in any suitable game or activity referred to or disclosed herein.

Fig. 12 shows a series of targets or containers 18 according to the present invention that includes targets 51, 52, 53 each, respectively, with an opening 54, 55, 56 of similar size for receiving and/or through which an item or disc is to be thrown to score in a game or activity according to the present invention. Optionally, each target 51 - 53 may have a scoring value so that an item or disc passing therethrough or thereinto merits that score (and, in one aspect, a score value on the item thrown is multiplied by the numeric value on the target). It is within the scope of this invention to have two or more than three targets 41 - 43. A set 40 (or two or more than three such targets) may be used in any suitable game or activity referred to or disclosed herein.

In one game or activity according to the present invention one or more players and/or one or more teams attempts to hit one or more other players and/or members of one or more other teams with a plurality of throwing items or discs (which according to the present invention may be any throwing item, flying disc, or disc referred to or disclosed herein). A player at whom an item or disc is thrown attempts to avoid being hit by the item or disc. A player or team scores by hitting an opposing player with an item or disc. The score can correspond to

the number of times a player is hit by a thrown item or disc. A score can be determined and/or enhanced or multiplied by a scoring value on a disc. Optionally a player (or the player's team) at whom an item or disc thrown at the player can score by catching the item or disc before it hits the player. Any number of players and/or teams can be on offense or defense in such a game or activity, i.e., throwing or being thrown at.

Figs. 13A - 13D show a flying disc 60 according to the present invention which has a body 61 and an outer soft rim 62 that is connected to, attached to, or formed integrally of the body 61. The soft rim 62 may be made of any suitable soft material, e.g., but not limited to, soft foam, plastic, cloth, or an inflated member. As shown the soft rim 62 is shaped with a groove 62a that corresponds to the shape of a lower lip 61a of the body 61. The rim 62 may be attached to the body 62 with a friction fit, with a press fit, and/or with glue or adhesive; or, alternatively, the rim 62 may be removable from the body 61. For each of a plurality of rims 62, rims may be of different colors and/or may bear other different identifying and/or scoring indicia. In certain aspects the rims 62 are sufficiently soft that the discs do not injure a person struck by the discs. Alternatively, a soft rim may be provided that encircles a disc or flying disc without part of it projecting under the disc body.

Fig. 14 shows a disc 64 according to the present invention which is made of foam or other similar soft material. Fig. 15 shows a flying disc 65 which is generally circular viewed from above which has a lip (not shown) like the lip 61a, Fig. 13D. The disc is made of foam or other similar soft material.

Figs. 16A and 16B show a throwing item 70 which has a soft body 71 and, optionally, an inner and/or central weight member 72. The soft body 71 may be flat or it may be fashioned, configured and shaped as a flying disc. The weight member has sufficient mass so that the item 70 can be effectively and accurately thrown a desired distance. It is within the scope of this invention to use two, three, four, or more such weight members and to locate them on or in the body of a disc as desired. Also, a weight member need not, according to the present invention, extend all the way through a disc body. A disc body may be sufficiently flexible so that a weight as shown in Fig. 16A can be inserted through an opening 73 as is shown in the disc body 71; or, as shown e.g. in Fig. 16D, a weight member 72a may have parts 72b and 72c

that fit or mate together. Any suitable mating structure may be used within the scope of this invention, e.g., but not limited to friction fit, press fit, or mating threaded structure like the structure 72d, 72e of Fig. 16D, and/or adhesive, tape or glue may be used to hold parts together and/or to a disc body. Light material may be used instead of any weight member described herein and in the drawing figures light material is substituted for the weight member. "Light material" includes: reflective material; fluorescent material; and any actual light either battery or solar powered.

In certain aspects any flying disc or disc disclosed or referred to herein, or a plurality of them, or a flying disc 60 (or discs) and/or a throwing item 70 (or items) are used in a game or activity according to the present invention as described above in which an item or disc is thrown to hit an opposing player. Fig. 17 shows a system 75 in which players P10, P11, and P12 (who may all be on one team or who may play as individuals) throw one or more discs 76a, 76b, 76c, respectively, at containers 77a, 77b, 77c, respectively, which may be a pre-set distance d away from the throwing players. Scoring is based on the number of discs successfully thrown into a container; the number of discs within a certain distance of a container although they did not enter a container; and/or scores indicated on the discs themselves. Any disc or flying disc disclosed or referred to herein may be used. In certain aspects, each player P10, P11, P12 has a corresponding teammate P13, P14, P15, respectively, who is allowed to return thrown discs to a teammate, discs which failed to enter a container, so that the original throwing player may have a second (or third, or fourth, etc.) chance to throw a disc successfully into a container. Optionally, e.g., player P13 may be allowed to secure a disc thrown by player P11 and, instead of throwing it to player P11 for a re-throw, throw it to designated area from which player P11 must retrieve it prior to again attempting to throw it into a container to score; thus a player at the location of the containers in this aspect must, if possible, return his corresponding teammate's discs for re-throwing, and try to prevent opposing players from getting the discs and throwing them away from the player who initially threw them. Optionally, players near the containers may be deleted and the players P10, P11, P12 are required to retrieve their own discs which failed to enter a container and return to the throwing position to re-throw such discs. Any suitable target or container may be used instead of the containers 77a, 77b, 77c. Optionally,

players P13, P14, P15 may go to the throwing area with retrieved discs (that failed to enter a container when initially thrown) and attempt to throw them into a container. Any suitable number of players and/or teams may play a game as shown in Fig. 17.

Fig. 18 illustrates an arrangement for a game or activity according to the present invention in which one or more players P20 attempt to hit one or more players P21 with a disc 78 or flying disc. Individuals or teams may play this game. Any disc or flying disc disclosed or referred to herein may be used, including, but not limited to, the items in Figs. 13A - 16B described above. Optionally, players may be required to be separated a distance *e.* Although players are shown as facing each other in a lined-up fashion, any configuration may be used, *e.g.*, but not limited to, players to be hit in a circle and players throwing in the circle's center, or vice versa. Optionally, a player at whom a disc is thrown may retrieve it and attempt to hit an opposing player. Scoring may be based on hits and/or on scoring values indicated on a disc. Optionally, a player at whom a disc is thrown may score by catching the disc in the air before it strikes an object or player. Players P20 may begin with any number of discs. Optionally players P21 may also begin the game with discs to be thrown at the players P20 and both sides (or multiple teams) may throw discs simultaneously.

Figs. 19A - 19C show a flying disc 300 according to the present invention which includes a flying disc body 302 with a top 304 and a bottom 306. Releasably secured to the bottom 306 is a computer disc or "CD" 301 with tape pieces 303. It is within the scope of this invention to releasably secure the disc 301 to the flying disc body 302 with any known tape, adhesive, glue, or suitable releasable securement apparatus or device. Fig. 19D shows another embodiment of the disc 300 with two movable or bendable tabs 307 holding the disc 301 in place on the bottom of the flying disc. It is to be understood that the disc body 302 may be any known flying disc, disc, Frisbee (TM) device, and any disc body disclosed herein. Also, the overall shape of the disc (and of any disc or disc body disclosed herein), as viewed from above may be any suitable shape, including, but not limited to, oval, circular, triangular, square, rectangular, pentagonal, hexagonal, septagonal, octagonal, nonagonal, etc.

Fig. 20 shows a flying disc 390 according to the present invention with a disc body 392 and a chamber 394 formed of or secured to a bottom 396 of the disc body 392. The chamber

394 includes a side wall 395 and a lower wall 397 and it houses a computer disc 398 which is removable out through an open end 399. A chamber such as the chamber 394 may, according to the present invention, be provided on any disc body disclosed herein.

Figs. 21A and 21B show a flying disc 380 according to the present invention with a disc body 382 and a sleeve 381 attached to or formed of the disc body 382. A computer disc 383 is releasably held by and within the sleeve 381. A sleeve like the sleeve 381 can, according to the present invention, be provided on any disc body disclosed herein.

Fig. 22 shows a flying disc 340 according to the present invention with a disc body 342 having a bottom 346 and a top 344 with a top recess 343 in which is releasably positioned a computer disc 341. The computer disc 341 may be releasably held in the recess 343 with a friction fit and/or with any suitable tape, adhesive, tab(s), etc.

Fig. 23 shows another embodiment of the disc 340 of Fig. 22 with a hole 345 through a lower wall 347 that defines part of the recess 343. A finger or suitable object may be thrust through the hole 345 to facilitate removal of the disc 341 from the recess 343. A recess like the recess 343 and/or with a hole like the hole 345 may be provided on any disc body disclosed herein.

Fig. 24 shows a flying disc 350 according to the present invention with a disc body 352 and a recess 353 (like the recess 343) with a lower wall 357 (like the lower wall 347). A manipulable or bendable clip 359 releasably holds a paper booklet 355 on a lower surface of the wall 357. A computer disc 351 resides releasably within the recess 353. Alternatively, the clip 359 may hold a computer disc instead of or in addition to the booklet 355 and, in one such aspect, the recess 353 is deleted. Alternatively, two or more clips 359 may be used. Alternatively one, two or more clips 359 are positioned on top of the disc body 352 instead of or in addition to the one or more clips 359 on the bottom of the disc body. It is within the scope of this invention to provide one, two, three or more clips 359 on any disc body disclosed herein.

Fig. 25 shows an object containing nesting combination of two flying discs, 360 and 361 (with disc bodies like the body 332, e.g.). The two discs are, in one aspect, releasably held together by a friction fit between the disc's lower edges 362, 363 respectively. An object, e.g.

but not limited to a paper, a booklet, and/or a computer disc 365, is held between a lower surface 366 of the disc 360 and an upper surface 367 of the disc 361. It is within the scope of this invention to emplace any suitable object between the two discs. It is within the scope of this invention to nest together any desired number of flying discs, e.g. one, two, three, four, five or more. It is within the scope of this invention to nest together any discs of any shape disclosed herein which have a nestable shape.

Figs. 26A, 42A, and 43A show patterns that may, according to the present invention, be applied to any box described or disclosed herein to facilitate the making of throwing objects from such a box.

As shown in Fig. 42B, throwing objects 241, 242, and 243 have been made from a box (not shown) by cutting along or severing along lines 241a, 242a, and 243a of a pattern 240 (Fig. 42A). Cutting along (or severing along) a line 244a provides a hole 244 through the throwing object 243.

As shown in Fig. 43B, throwing objects 251, 252, and 253 have been made from a box (not shown) by cutting along or severing along lines 251a, 252a, and 253a of a pattern 250 (Fig. 43A). Cutting along (or severing along) a line 254a provides a hole 254 through the throwing object 253.

As shown in Fig. 26B, throwing objects 261, 262, 263, and 264 have been made from a box (not shown) by cutting along or severing along lines 261a, 262a, 263a, and 264a of a pattern 260 (Fig. 26A). Cutting along (or severing along) a line 265a provides a hole 265 through the throwing object 264.

Figs. 26B, 42B and 43B also illustrate that, according to the present invention, any suitable or desirable shape (including, but not limited to any shape referred to herein) may be used for any throwing object according to the present invention and for any hole in any such object and any of the objects in these drawings may, according to the present invention, be used to throw at any target disclosed herein.

Figs. 27A and 27B show a target 190 made from a single box which has (at least) two sides 191, 192. A target opening 193 is cut or removed from the box side 191 (indicated by a line 193a in Fig. 27A) and two strips 194a, 194b are cut or removed from the box side 192

(indicated by lines 194c, 194d, respectively in Fig. 19A) with an end thereof remaining as an integral part of the box side 192 (as is the case with the strip 184, Fig. 5A). Ends 195a, 195b are inserted through openings 196a, 196b respectively, and the target 190 can assume an upright position (like the target in Fig. 18B).

Figs. 28B - 28D show a target 280 which may be made from any suitable box disclosed herein and which, as shown, uses a box 289 as in U.S. Patent 5,702,054 which is fully incorporated herein for all purposes. The target 280 has a hole 282 (cut along line 282a of Fig. 28A) made in a lid 283 of the box 289. The hole 282 provides an opening at which thrown objects may be directed. The lid 283 may be positioned in an upright position as in Fig. 28B to provide an upright target or the lid may be closed as in Fig. 28C to provide a flat target. Alternatively, the target 280 as shown in Fig. 28C may be stood upright on one of the thin box edges.

Figs. 29A - 29D show alternative cut-out line patterns for targets 291 - 294, respectively, that are made by cutting (or severing) openings along the lines within the box outlines in Figs. 29A - 29D. Also, the cut-out parts from the boxes in Figs. 29A - 29D may, according to the present invention, be used as throwing objects to throw at any target disclosed herein.

Fig. 30D shows a knock-down item 387 according to the present invention made from a folded box part 384 (Figs. 30A and 30C) whose ends are inserted through slots 385 in end parts 386 (Fig. 30B). The end parts 386 (also made from a box and which in one aspect are made from the same box as the folded box part) are optional.

Fig. 31C shows a knock-down item 310 according to the present invention made from a folded box part 311 (Fig. 31A) whose ends are inserted in slots 312 in end parts 313. The end parts 313 (Fig. 31B) (also made from a box and which in one aspect are made from the same box as the folded box part) are optional.

Any throwing object according to the present invention may be used in an activity to knock down one or more knock down items like the item 300, Fig. 30D, and/or one or more of the items 310, Fig. 31D.

Fig. 32B shows a target 320 according to the present invention made from a box 329

(Fig. 32A). An opening 323 is made by cutting or severing along line 323a, Fig. 32A, which also produces a throwing object 323b (Fig. 32C). A secondary target 324 is made by cutting or severing along line 324a, Fig. 32A. The secondary target 324 is hung from the remaining box part 329a by inserting an end of the secondary target through an opening 326 made by cutting through or severing a line 326a, Fig. 32A. Folding the part of the box 329 seen in Fig. 32A (which has been separated from the box as shown in Fig. 32B) makes it possible for the target 320 to stand upright with the secondary target 324 hanging in the opening 323. Any throwing object or disc disclosed herein may be used to hit the secondary target 324 and/or to pass through the opening 323. It is also within the scope of this invention to make the secondary target any shape disclosed herein; to use two, three or more secondary targets; and to use any box disclosed herein as the box 329.

Alternatively the secondary target 324 may be cut-out or separated from the box 329 so that it has a part still connected to the box and so that it hangs down in an opening made like that shown in Fig. 32B. A secondary target or targets of any desired shape may thus be made.

Fig. 33B shows a game set 330 with game pieces 331 and a throwing object 332 made from part of a box 339 (Fig. 33A). Knock-down game pieces 331 are made by cutting or severing box part 339 along lines 331a and the throwing object 332 is assembled from parts 332b made by cutting or severing along lines 332a, Fig. 33A.

Each throwing object part 332b has a slot 337 made by cutting along lines 335a (Fig. 33A). Thus when the parts 332b are divided in two sets of three each with their slots aligned, the two sets are combined by moving adjacent set parts into adjacent slots. Then the parts 332b are separated, as shown in Figs. 33B and 33C, creating a throwing object 332 that will roll on a surface.

As shown in Fig. 33B, part of the lower portion of the game pieces 331 has been folded so that the game pieces 331 can stand upright until knocked over by a thrown or rolled throwing object 332. It is within the scope of this invention to use any throwing object disclosed herein to knock down the game pieces 331 and any number of such pieces (one, two, three — nine, or more) may be used.

Fig. 33D shows how two (or more) of the parts 332b are fitted together with their slots

337 aligned and then the two parts are pushed together with each slot receiving a portion of the opposing part. With slots of sufficient size stacks of multiple parts may thus be meshed together (e.g. as in Fig. 33C).

The box 339 of Fig. 33A optionally includes a line 338a which indicates a shape that may be separated from the box 339 to construct a throwing object 338 (or a die for a game) as shown assembled in Fig. 33D. Optional tabs 338b are insertable in corresponding openings 338c.

Fig. 34A shows a box part 449 with a first surface 449a printed with a set of dominoes 440a. By cutting along the outlines of the dominoes a set of dominoes 440 (Fig. 34C) is produced. As shown in Fig. 34B, a reverse surface 449b on the other side of the surface 449a of Fig. 34A is printed with a trademark, tradename or other identifier, in this case "GINA LOVE," which is in registration with the dominoes of the surface 449a. Thus when the dominoes are separated from the box, each domino will bear the mark, name, or identifier. An example of this is shown in Fig. 34C in which a domino 447 according to the present invention which has been separated from a box has a side 447a with typical domino dots and a reverse side 447b with the words "DYNAMO PIZZA." Any game piece, throwing object, or part cut from a box disclosed herein may have printing in registration on both sides (opposite box surfaces of the same part of a box) like the dominoes 440 or 447.

Instead of dominoes as printed on the box part of Fig. 34A, any game pieces may be printed thereon, e.g., but not limited to, checkers or chess pieces; and any game board (checkerboard, parchisi, etc.) may be printed thereon or on a part of a box spaced-apart from an area on which game pieces are printed. Alternatively, the alphabet, times tables, maps, artworks, puzzles, flashcards, word games, word game pieces or letters, crossword puzzles, TV schedules, coupons, movie tickets, tickets for sporting events, trivia tests, book summaries, and/or course outlines may be printed on part of a box.

Figs. 35A and 35B shows a box 450 according to the present invention which has a bottom 451 and a top 452 joined hingedly together by a tearable, cuttable, or severable part 453. Upon tearing, etc., the part 453, two throwable discs are created. Alternatively, the two parts may be connected or adhered together to form a single throwing disc. Optionally parts of one disc's edges or an entire disc's edge may be turned down to create any of the flyer discs

disclosed herein and described above. As shown in Fig. 35B the box 450 may be closed to contain a food item 457 (e.g., but not limited to, a cake, pie, or pizza 455). Optionally the cake, etc. may rest on a separate round support 456 which itself may be used as a throwing disc or as part of any flyer disc disclosed herein. It is within the scope of this invention for the bottom 451 and/or top 452 to have a side 451a, 452a, respectively around its perimeter of sufficient height so that a cake, etc. is enclosable within the box 450. Such a side or sides may be provided for any box described or disclosed herein.

Fig 36A shows a box 460 according to the present invention which has a bottom 461 and a top 462 releasably connected to the bottom 461 with a part 463 which may be torn, cut, or severed producing two generally circular box parts which may be used as throwing discs in any game or activity disclosed herein (as may the bottom and top of Fig. 35A). The top 462 has an optional tab 464. The part 463 and the tab 464 are sized and positioned so that they are receivable, respectively in openings 465, 466 made by cutting or severing along lines 465a, 466a, Fig. 36A. Parts 461, 462 are produced as shown in Fig. 36C. They may be combined to produce a multi-part throwing disc 469, Fig. 36D, by inserting part 463 of the top 462 into opening 465 of the bottom 461 and part 464 of the top 462 into opening 466 of the bottom 461. As with the box of Fig. 35A, the parts 461, 462 may have sidewalls 461b, 462b respectively, therearound of a desired height.

Fig. 37A shows a box 470 according to the present invention with a bottom 471 and a top 472 each of which has a circular shape when viewed from above or below. The top 472 and bottom 471 are connected together along a box portion 473 and the top 472 can be folded at this portion 473 over and into contact with the bottom 471. The top 472 and/or the bottom 471 may have, respectively an upstanding perimeter sidewall 472a, 471a of any desired height (as may any box according to the present invention shown in top view herein). The top 472 may be connected to the bottom 471 when the top 472 is folded over on the bottom 471 in any manner disclosed herein, including, but not limited to, by fastener(s), glue, and/or interfitting part(s) or structure(s). It is within the scope of this invention for the top 472 and bottom 471 to be of any identical shape, e.g. but not limited to, triangular, square, rectangular, pentagonal, etc. Optionally an opening 472b may be made in the top 472 and/or any opening 471b may be made

in the bottom 471 and such opening(s) may be of any desired size or shape and any piece thus separated therefrom may be used for any throwing object(s), disc(s), and/or knock down item(s) disclosed herein

Fig. 37B illustrates a box 475 according to the present invention with a bottom 475a, with an opening 475d and a top 475b with a tab 475c sized and configured so that upon folding of the top 475b on the bottom 475a the tab 475c is insertable into the opening 475d to hold the top 475b and the bottom 475b together. A hinge part 475e integral with the box 475 permits folding of the top 475b with respect to the bottom 475a. Such structure (tab, opening, and/or hinge part) to hold two parts together may be used for any box disclosed herein.

Fig. 37C shows a closed version of the box 475 with the top 475b folded over on the bottom 475a and the tab 475c in the opening 475d. As with any such tab or part end disclosed herein, the tab 475c may be turned or twisted to prevent it from coming out of the opening 475d.

Fig. 37D shows a target 476 according to the present invention which has projecting parts 476a (like those of Figs. 41B) extending through slots 476b (like those of Fig. 41A and 41B). The projecting parts 476a are coming out of the drawing sheet as viewed in Fig. 37D. Each part may be used as a target toward which a throwing object with an opening is thrown in an effort to have it land over and encompass the part 476a. In one aspect the target 476 may be used to play a "TIC-TAC-TOE" type of game with each player having multiple throwing objects to throw at the various parts 476a in an effort to have three thrown objects in a row on three aligned parts 476a.

Fig. 38 discloses a box 480 on which is printed or provided a checkerboard (or chessboard) 482 which may be used for board games that use such a checkerboard. The checkerboard 482 may remain on the box 480 or it may be separated from it. Game pieces 484 may be printed or otherwise provided on the box 480 and separated therefrom. The game pieces may be checkers (as shown) or chess pieces or any other game pieces used in a board game. Either the board 482 or the game pieces 484 may be deleted from the box 480.

Figs. 39A and 39B show a target 210 according to the present invention made from a box 210 with (at least) sides 211, 212. Openings 213d (Fig. 39B) and 213c are made in the side 212

by removing box material within lines 213b and 213a, respectively, making two target openings. An opening 214 (Fig. 39B) is made in the box side 211 by severing or cutting the box side 211 along a line 214a. The resulting box piece 215 still has a part 215a integral with the box side 211. As shown in Fig. 39B, the box part 215 has been folded down and its end 216 has been inserted through an opening 217 made along line 217a (Fig. 39A). It is within the scope of this invention to provide a target opening with two segments (e.g. like the openings 213d, 213c) or with three, four or more such opening segments — of which may be any desired shape or size. Alternatively, a single opening may be used instead of the openings 213d, 213c. In one game or activity an object, disc, etc. is thrown through the opening 214 and one of the openings 213d, 213c.

Figs. 40A and 40B show a target 220 according to the present invention made from a box 229 with (at least) two sides 221, 222. A strip 224 is cut or removed along line 224a (Fig. 40A) and is then inserted through an opening 226 (made along line 226a, Fig. 40A). With the sides 221, 222 folded together as shown in Fig. 40B the strip 224 projects out from the opening 226. If the sides 221, 222 are laid flat the strip 224 projects up therefrom providing a target about which thrown objects with holes sufficiently large therethrough may land with the object encompassing the strip 224. Points may be awarded (e.g. as in horseshoe games) for objects near the strip 224 and/or for objects encompassing it (as may be the case with any game or activity involving any projecting target and thrown objects disclosed herein).

Figs. 41A and 41B show a target 230 according to the present invention like the target 220 (Fig. 40A); but with a strip 234 (initially like the strip 224, Fig. 40B) having a folded part 235 with an end inserted into an opening 237 which is at an angle (any angle may be used) to an opening 238 through which the strip 234 projects. A box 239 (like the box 229, Fig. 40A) with (at least) sides 231, 232 is used to make the target 230. The sides are folded e.g. as the sides 221, 222 in Fig. 40B.

As shown in Fig. 42B, throwing objects 241, 242, and 243 have been made from a box (not shown) by cutting along or severing along lines 241a, 242a, and 243a of a pattern 240 (Fig. 42A). Cutting along (or severing along) a line 244a provides a hole 244 through the throwing object 243.

As shown in Fig. 43B, throwing objects 251, 252, and 253 have been made from a box (not shown) by cutting along or severing along lines 251a, 252a, and 253a of a pattern 250 (Fig. 43A). Cutting along (or severing along) a line 254a provides a hole 254 through the throwing object 253.

Fig. 44 shows a flying disc 510 according to the present invention that has a disc body 512 with a central opening 514. Held within the central opening 514 by severable parts or pieces 516 is a central disc 518 which may be a flying disc itself or may be, according to the present invention, a computer disc. Upon separation of the central disc 518 (or the computer disc) from the disc body 512 by breaking the pieces 516, the central disc 518 may be used as a flying disc or, if it is a computer disc, as a computer disc in a computer. It is also within the scope of this invention to have a disc body of sufficient size to hold two, three, four or more central discs or computer discs, each held initially in place in an opening in the disc, like the opening 514 by pieces like the parts or pieces 516. One, two, three, five or more parts or pieces 516 may be used to hold a computer disc in place. In certain aspects the parts or pieces 516 are plastic pieces or "sprues" and the disc body is plastic. In other embodiments, the central disc or discs may be any disc described herein; may have any indicator described herein; and may be used in any activity described herein.

Referring now to Figs. 45A - 45C, a flying disc 410 has a disc body 412 which is generally circular as viewed from above as in Fig. 45A. The disc body 412 has a plurality of spaced-apart slits 414 which go all the way through the disc body 412 (but which, according to the present invention, may be made so that they do not cut completely through the disc body 412). As shown in Fig. 45C, portions 16 of the disc body 412 between pairs of slits 414 have been bent down forming a downwardly projecting lip 418 around the perimeter of the disc body 412. Although the portions 416 are shown folded down in a scalloped arrangement (one side of a portion overlapping the adjacent portion), they may be folded down with two sides of one portion both overlapping adjacent portions. Also, as with any disc herein, if the slits 414 do not extend completely through the body 412, the portions 416 may be folded either way with respect to the slits 414; i.e., e.g. in Fig. 45B the portions 416 may be folded up or down. It is also

within the scope of this invention to fold one or more portions 416 up and one or more down or to alternate up-down portions around a disc's perimeter.

The disc body 412 (and any disc body herein) may be made of any suitable material. For a circular disc (as viewed from above) any disc body disclosed herein and any circular secondary piece or disc may be any desired diameter. In certain aspects the disc body (and any disc body herein) is made of typical cardboard about one fourth of a centimeter or about one half of a centimeter thick which has an internal support structure, e.g. as the common cardboard used in typical cardboard boxes.

Figs. 46A and 46B show a flying disc 420 according to the present invention which has a disc body 422 and spaced-apart slits 424. As shown in Fig. 46C portions 426 between pairs of slits 424 have been folded down to form a peripheral lip 428.

Fig. 47C shows a flying disc 430 according to the present invention which has a primary disc 431 (Fig. 47A) with a disc body 432 and a plurality of bent down portions 433 between spaced-apart slits 434. Attached to or held within an underside of the disc body 432 is a secondary piece 435 (shown as circular in shape as viewed from above as in Fig. 47B, but which may be any desired shape). Staples 436 are shown connecting the secondary piece 435 to the disc body 432; but it is within the scope of this invention to use any suitable adhesives, glues, tapes, brads, nails, releasably cooperating hook-and-loop material, and/or mechanical connectors to connect the secondary piece to the disc body; and/or to fold the portions 433 so that the secondary piece is held within them; and/or to tape together, connect together, and/or interlock the portions 433 together to hold the secondary piece in place; and/or to attach, adhere, or connect the secondary piece to one, two, or more, or all of the portions 433. The secondary piece may be for facilitating flight of the disc 430/piece 435 and/or may have indicia and/or advertising thereon. In one particular embodiment in which a primary disc is cut from a cardboard box of cardboard about a quarter inch thick, the disc body is about ten and three-quarters inches in diameter and the secondary disc is about nine inches in diameter with the folded portions (eleven of them) between three-and-a-half and two inches long and about an inch wide; and two staples hold the two discs together.

As shown in Figs. 47A and 47B the secondary piece 435 (and any disc or secondary

piece herein) may have one, two (as shown) three, four or more tabs 437 which fit into corresponding slits or openings 438 on a primary disc 431 to hold the secondary piece to the primary disc. Such tab/slit apparatus may be used with or without staples 436 or other adhesives, connectors, etc.

Figs. 48A and 48B show a flying disc 440 according to the present invention with a disc body 443 and a plurality of spaced-apart folded-down portions 446 around the disc perimeter. Portions of the disc body 442 are torn, cut or otherwise removed to permit the folding of the portions 444.

Fig. 49 shows a flying disc 550 with markings or slits 554 around a perimeter of a disc body 552. Portions 556 can be folded down (or up) from the disc body 552 to form a peripheral lip.

Fig. 50 shows a flying disc 560 with markings or slits 564 around a perimeter of a disc body 562. Portions 566 can be folded down (or up) from the disc body 562 to form a peripheral lip.

Figs. 51A - 51E show a variety of flyers with various shapes 571 - 575, respectively, as viewed from above for flyers according to the present invention and any flying disc herein may have any of these shapes as well as the shape of any desired polygon.

Fig. 52 shows a flying disc 580 according to the present invention which may be any flying disc or flyer disclosed herein. The flying disc 580 has a disc body 582 to which are attached one, two (as shown), three, four or more weight members 583. It has been found that some disc bodies fly better with added weight and/or with an added secondary piece (e.g. as in Fig. 47C). Any weight member may be connected to or attached to a disc body with any attachment, or connection disclosed herein or with any suitable known securement apparatus, device, or method. Any weight member may have light material substituted for it.

Fig. 53A shows a flyer container 590 according to the present invention which has a lower box part 591 for containing an item 599 and an upper flying disc part 592 hingedly connected to the lower box part 591 with a hinge 593. The hinge 593 may be an easily severable or tearable hinge made, e.g., of paper, cardboard, or plastic so that the disc part 592 (Fig. 53B) is separable from the lower box part 591. Alternatively, the lower box part 591 is

also a flying disc. The disc part 592 and the lower box part 591 may be any desired size and have any desired dimensions. The item 591 may be any item that fits within the flyer container 590, including, but not limited to, pastries or pizza. In one aspect the entire container 590 is made of plastic in a single mold with either an easily separable etc. hinge as described above or with a sturdier hinge that is not so easily separable.

Fig. 54A shows a flying disc 100 with a disc body 102 and markings or slits 104. As shown in Fig. 54B the disc body 102 has been torn or cut and portions 106 have been folded down forming a peripheral lip 108. As shown in Fig. 54C, a flying disc 100a has a disc body 102a (like the disc body 102, Fig. 54A) that has not been cut or torn and portions 107 have been folded down to form a peripheral lip 109. As may be done with any disc or flyer disclosed herein, Fig. 54C shows that the markings or slits may be eliminated.

Figs. 55A - 55D show multi-disc combinations which each include two flying discs (which may be generally like any flying disc or flyer disclosed herein or in the prior art cited herein, but with the particular disclosed structure for releasably mating together two discs or flyers).

As shown in Fig. 55A a periphery of a flying disc 110 is releasably held by friction fit within a periphery of a slightly larger flying disc 111. As shown in Fig. 55B a lower flying disc 112 has a flattened outer portion 112a that abuts a corresponding flattened inner portion 113a of a flying disc 113 so that the flying disc 112 is releasably held by a friction fit within the flying disc 113.

As shown in Fig. 55C a flying disc 114 has a flattened tapered outer portion 114a that abuts a corresponding flattened tapered inner portion 115a of a flying disc 115 so that the flying disc 114 is releasably held by a friction fit within the flying disc 115.

Fig. 55D shows a flying disc 116 with a portion 116a releasably held by a friction fit between a portion 117a and a portion 117b of a flying disc 117. The portion 117b may extend around the entire circumference of the disc 117 or two or more spaced-apart parts 117b may be used to hold the discs together.

Figs. 56A - 56C show a box 120 according to the present invention which has a box body 122, which may according to the present invention be a unitary structure as shown in Fig. 12C

that is foldable into a box or the box 120 may be made of separate pieces of material, e.g. but not limited to, cardboard. As shown in Figs. 56A and 56C the box is marked with markings 120a and 120b to indicate the boundaries of a flying disc 124 removable from a top 120c of the box and a secondary piece (or additional flying disc) 126 removable from a bottom 120d of the box 120. One of the flying disc 124 and the secondary piece (or disc) 126 may be smaller than the other so that, as shown in Fig. 56B, the box top 120c may be in an upright position to serve as a target at which (and/or through which) a flying disc, e.g. but not limited to, a secondary piece 126 used as a disc may be thrown. Also, the box itself may be a target into which a disc is thrown. Any disc removed from the box may be reduced in diameter to easily pass through a box opening and/or any opening may be enlarged for this purpose.

In one aspect the secondary piece 126 serves as a secondary piece 435 (in Figs. 47B, 47C). The box 120 may be any known box from which it is possible to form or remove the disc 124 and/or the secondary piece or disc 126. In one particular aspect, the box 120 is sized and configured to be a box for pizza. The box may be (but is not limited to) any box disclosed in any of U.S. Patents 6,206,277; 5,595,339; 6,065,669; D 420,583; and all the prior art cited in all these patents — all of which is incorporated fully herein for all purposes. Any desired number and size flying discs and/or secondary pieces or discs may be made of or removed from a single box.

Fig. 57 shows a flyer container 130 which may be any shape disclosed herein as viewed from above and which has a part 131 with an outer portion 133 and an inner portion 134 between which is releasably held by a friction fit an outer part 136 of a flying disc 132.

Fig. 58 shows a flyer container 140 which may be any shape disclosed herein as viewed from above and which has a part 141 of a flying disc 142 with a lip 143. Releasably held within the flying disc 142 is a support 144 whose bottom rests on the lip 143. By flexing the flying disc 142 and/or the support 144, the support is releasably from within the flying disc 142. An item 145, e.g. but not limited to, pastry, or pizza rests on the support 144. The lip 143 may, according to the present invention, be eliminated, and the support 144 held in place by a friction fit between it and the interior of the disc 142.

Any layer or layers of insulating material 146 as shown in Fig. 58 may be used with any

flying disc or flyer or container disclosed herein. Any layer or layers 146 in Fig. 58 (or all of them) may be deleted. A middle layer like the middle layer 146 in Fig. 58 may surround the item 145.

Any two flying discs and/or flyers according to the present invention which are appropriately sized and configured may, according to the present invention, be nested one inside the other either for shipment or for use and, in one particular aspect, two such discs and/or flyers are connected together for use, e.g. but not limited to, with staples, tape, or any other connector or connecting method disclosed herein.

Figs. 59A and 59B present other versions of the disc 10 of Fig. 45A. As shown in Fig. 59A staples 150 pass through overlapping parts of adjacent portions 16 of the disc 10. These staples hold the portions 16 together (and are used for some or all adjacent portions to connect some or all of them together) and prevent the portions 16 from moving, flopping around or bending back toward or to their original position. Any such portions of any disc or flyer according to the present invention may be thus connected with staples (or alternatively brads, clips, paper clips or other similar connectors).

As shown in Fig. 59B, the disc 10 has tape 152 that is taped around the disc's circumference to tape together the portions 16. Any such portions of any disc or flyer herein may be thus taped together.

Fig. 60A shows a flying disc 160 according to the present invention with a disc body 162 and a plurality of spaced-apart portions 161 that are to be folded down (e.g. like any folded down or bent down portions of any disc or flyer herein). Fig. 60B shows a flyer 163 according to the present invention with a plurality of spaced-apart portions 164 that are to be folded down like the portions 161, Fig. 60A. Any flyer or disc herein may have any desired number of portions like those of Fig. 60A (portions 161) or Fig. 60B (portions 164). Although these portions are shown as generally "scalloped" shape or semicircular, they may be any desired general shape, including but not limited to, triangular, square, or rectangular.

Fig. 61A shows a flying disc 170 with portions 171 (like the portions 161, Fig. 16A) whose folding or bending is facilitated by indentations or incomplete (not all the way through a disc body 172) cuts or grooves 173. Alternatively the indentations, etc. are replaced by lines

or markings indicating where the portion is folded or bent. Fig. 61B shows a flying disc 174 with a disc body 175 and spaced-apart portions 176 (like portions 171, Fig. 61A). Indentations or cuts 177 separate the portions 176 and markings 178 (or cuts or indentations) indicate where the portions 176 are to be folded or bent. Any disc or flyer herein may employ similar suitable indentations 177 and/or markings (or cuts) 178.

Incorporated fully herein by reference for all purposes are the following issued U.S. patents and the pending U.S. applications: U.S. patents 5,553,570; 5,799,615; 6,073,588; U.S. applications serial numbers 09/871,170 filed 5/31/2001, 09/953,094 filed 9/14/2001, 10/039,489 filed 10/28/2001 and 09/863,634 filed 5/23/2001.

What is claimed is:

CLAIMS:

1 1. A method for engaging in an activity, the activity to be engaged in by a plurality
2 of players, each player provided with at least one disc with identifying indicia, the method
3 comprising

4 each player throwing at least one disc at a target, each disc having identifying
5 indicia for identifying the player throwing said disc, and
6 scoring for each player based on a final resting location of said at least one disc.

1 2. The method of claim 1 wherein the plurality of players are divided into at least
2 two opposed teams.

1 3. The method of claim 1 wherein each disc has a score value indicator which
2 corresponds to a number of points that can be scored with said disc.

1 4. The method of claim 1 wherein the identifying indicia is color.

2 5. A method for engaging in an activity, the activity to be engaged in by at least two
3 players, the players divided into a first team and a second team each team with at least one
4 player, the first team provided with at least one disc, the method comprising

5 at least one player of the first team throwing the at least one disc at a player of
6 the second team.

7 6. A flying disc comprising

8 a disc body having an outer perimeter and a plurality of cuts spaced-apart
9 around the outer perimeter,

10 a plurality of portions of the disc body at the outer perimeter of the disc
11 body and between each pair of adjacent cuts, each portion of the plurality of portions at
12 an angle to the disc body to facilitate flight of the flying disc, each portion of the
13 plurality of portions adjacent and between two other portions of the plurality of portions,
14 and

15 each separate portion having a pair of spaced-apart sides, a side of each
16 separate portion overlapping a side of each adjacent separate portion.

1 7. The flying disc of claim 6 further comprising

2 a secondary piece connected to the disc body for facilitating flight of the

3 flying disc.

1 8. The flying disc of claim 7 wherein the disc body is made of cardboard having a
2 thickness, the disc body has a shape when viewed from above, the secondary piece has a shape
3 similar to the shape of the disc body when viewed from above, and the secondary piece has a
4 thickness substantially equal to the thickness of the disc body.

1 9. The flying disc of claim 7 wherein the secondary piece has at least one tab and
2 the disc body has at least one slit corresponding to the at least one tab, the at least one tab
insertable into the at least one slit to connect the secondary piece to the disc body.

1 10. The flying disc of claim 7 further comprising
2 the secondary piece connected to an underside of the disc body.

1 11. The flying disc of claim 10 further comprising
2 the secondary piece positioned within adjacent separate portions that are
3 folded down.

1 12. The flying disc of claim 6 wherein the disc body has a shape as viewed from
2 above from the group consisting of triangular, rectangular, square, pentagonal, hexagonal,
3 septagonal, octagonal, nonagonal, and decagonal.

4 13. An object of manufacture comprising a primary piece of material,
5 a disc body contained within and separable from the primary piece of
6 material,

7 the disc body having an outer perimeter, the outer perimeter marked on
8 the primary piece of material,

9 the disc body having a plurality of spaced-apart cut lines marked on the
10 disc body for indicating the location of cuts to be made on the disc body to form separate
11 portions of the disc body between each pair of adjacent cuts, said separate portions
12 foldable with respect to the disc body at said outer perimeter to facilitate flight of the
13 disc body, and

14 each separate portion having a first side and a second side, a side of each
15 separate portion overlapping a side of each adjacent separate portion.

1 14. The object of manufacture of claim 13 wherein the primary piece of material is

2 part of a box.

1 15. The object of manufacture of claim 14 wherein the box is a cardboard pizza box.

1 16. The object of manufacture of claim 13 wherein the primary piece of material
2 minus the disc body can form a target at which the flying disc can be thrown.

1 17. A flying disc comprising

2 a disc body having an outer perimeter and

3 a plurality of portions of the disc body made from and folded from the disc
4 body around the outer perimeter and at an angle thereto for facilitating flight of the flying
5 disc, each portion of the plurality of portions adjacent and between two other portions
6 of the plurality of portions, and

7 each portion having a pair of spaced-apart sides, a side of each portion
8 overlapping a side of each adjacent portion.

1 18. The flying disc of claim 17 wherein the plurality of portions of the disc body are
2 all folded in one direction from the disc body.

1 19. The flying disc of claim 17 wherein the disc body is cardboard.

1 20. A flying disc comprising

2 a disc body and

3 a computer disc on the disc body.

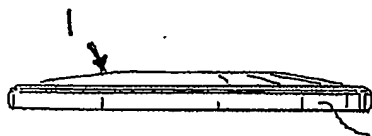


Fig. 1A

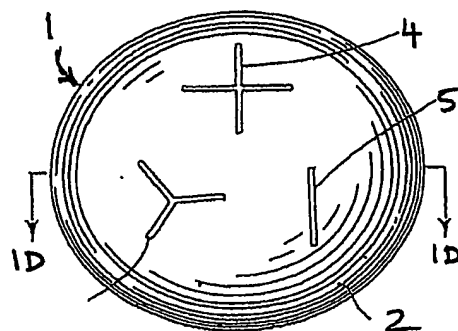


Fig. 1B

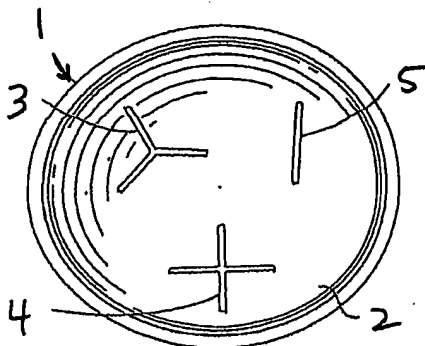


Fig. 1C

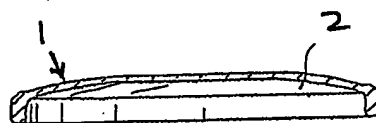


Fig. 1D

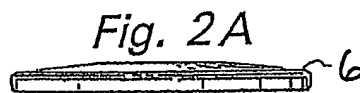


Fig. 2A

Fig. 2B

Fig. 2C

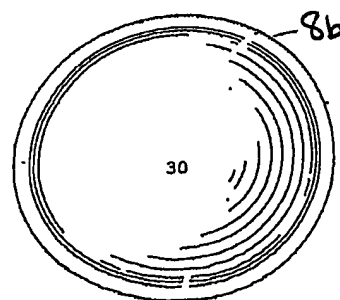
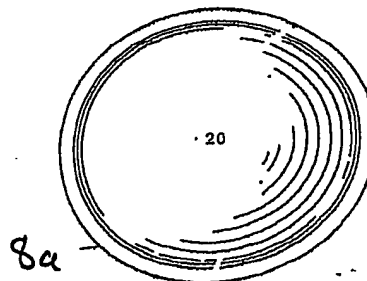
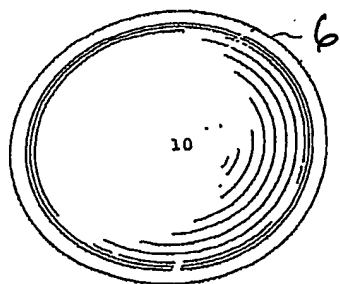


Fig. 2D

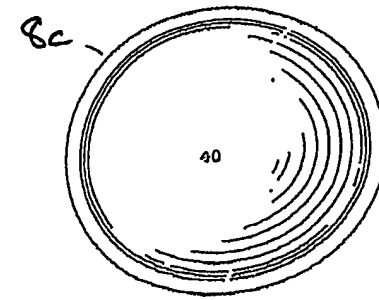
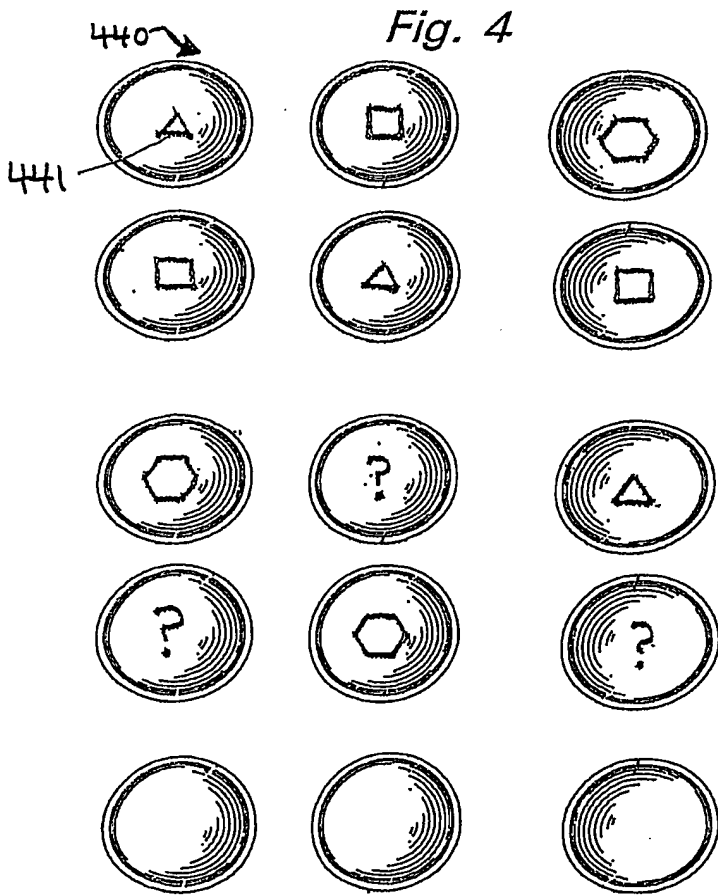
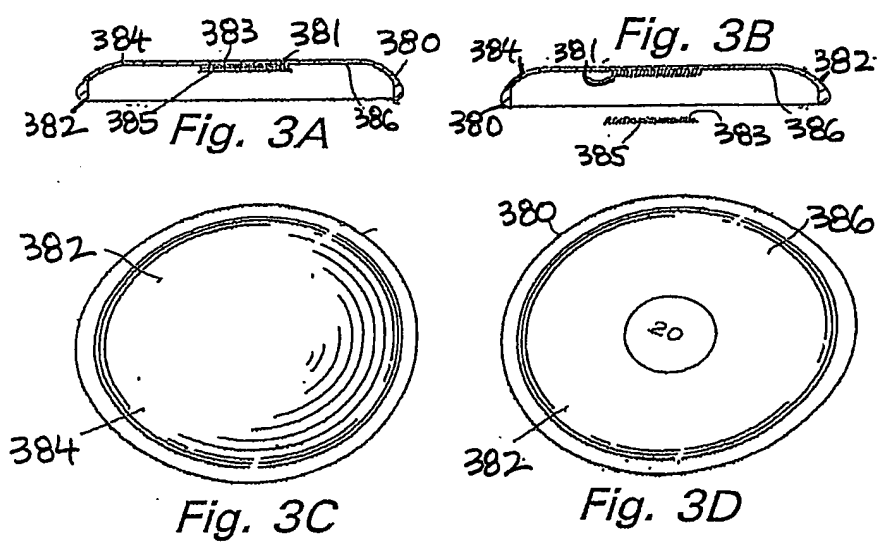


Fig. 2E



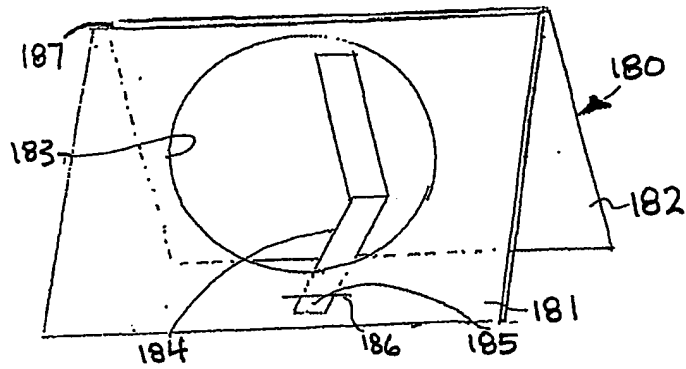


Fig. 5A

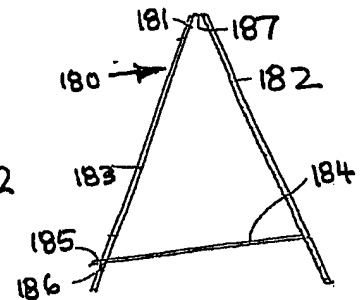


Fig. 5B

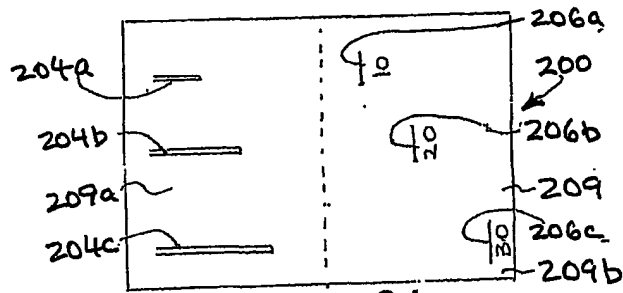


Fig. 6A

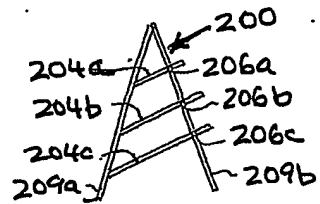


Fig. 6B

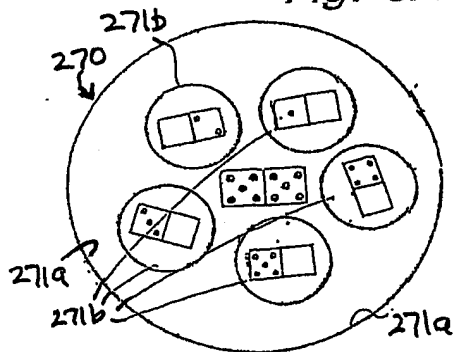


Fig. 7A

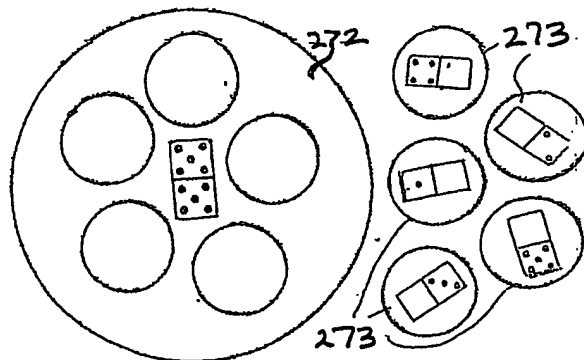
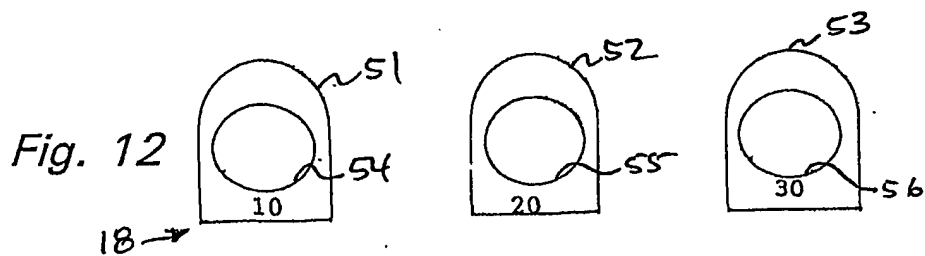
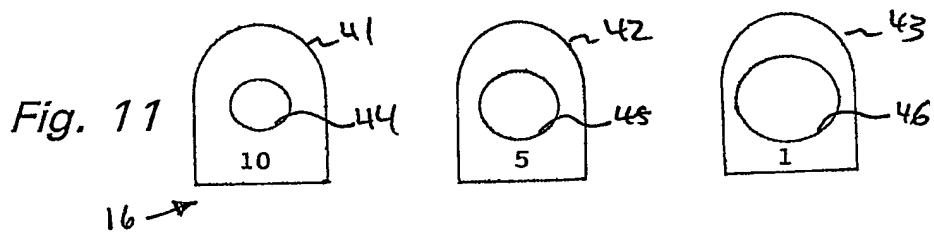
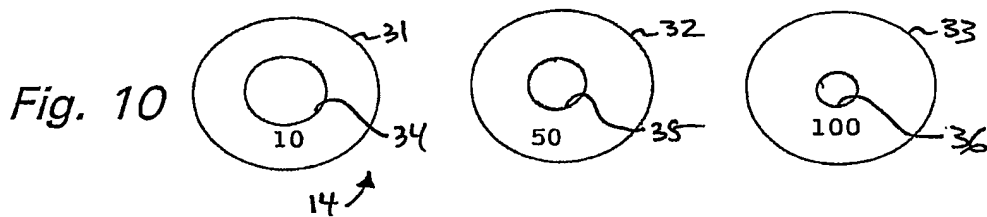
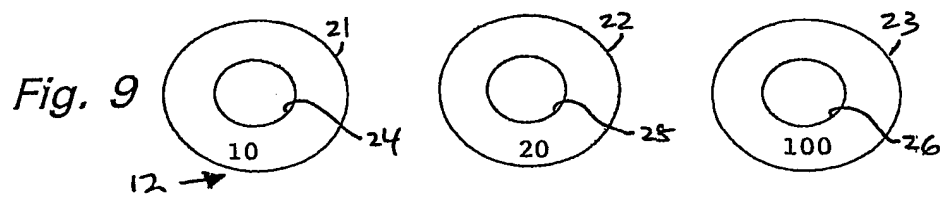
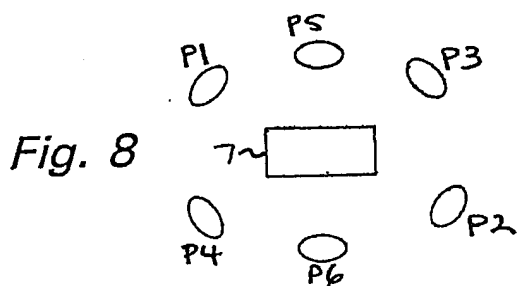


Fig. 7B



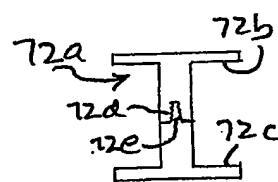
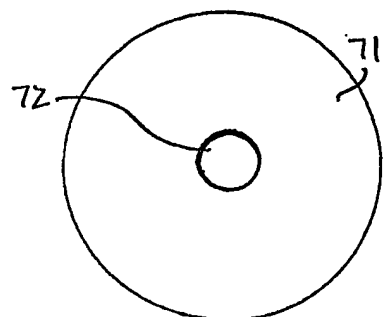
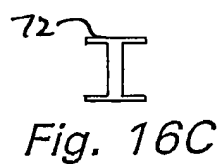
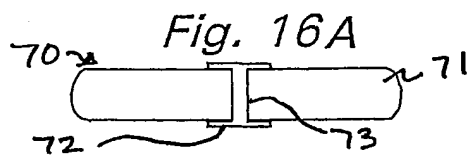
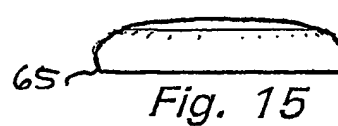
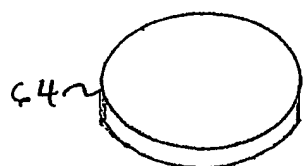
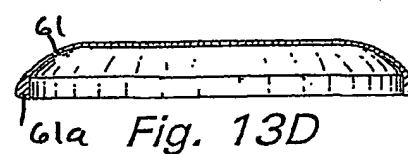
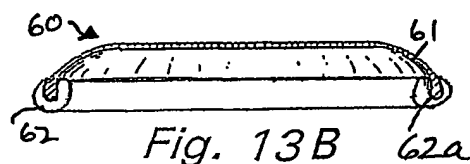
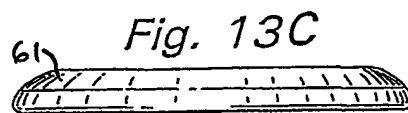
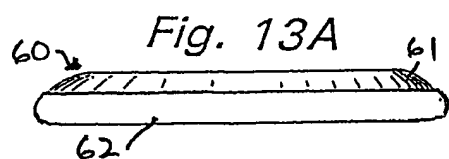


Fig. 16B

Fig. 16D

Fig. 17

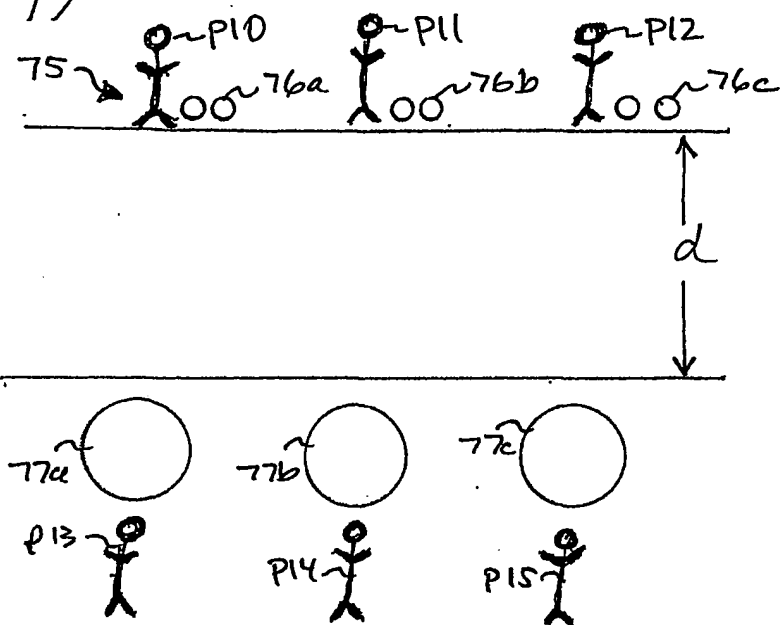
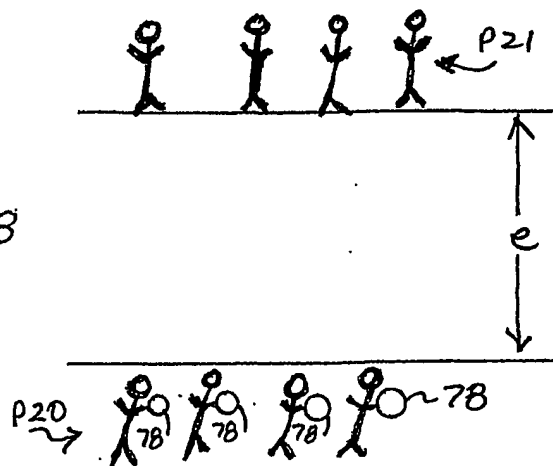


Fig. 18



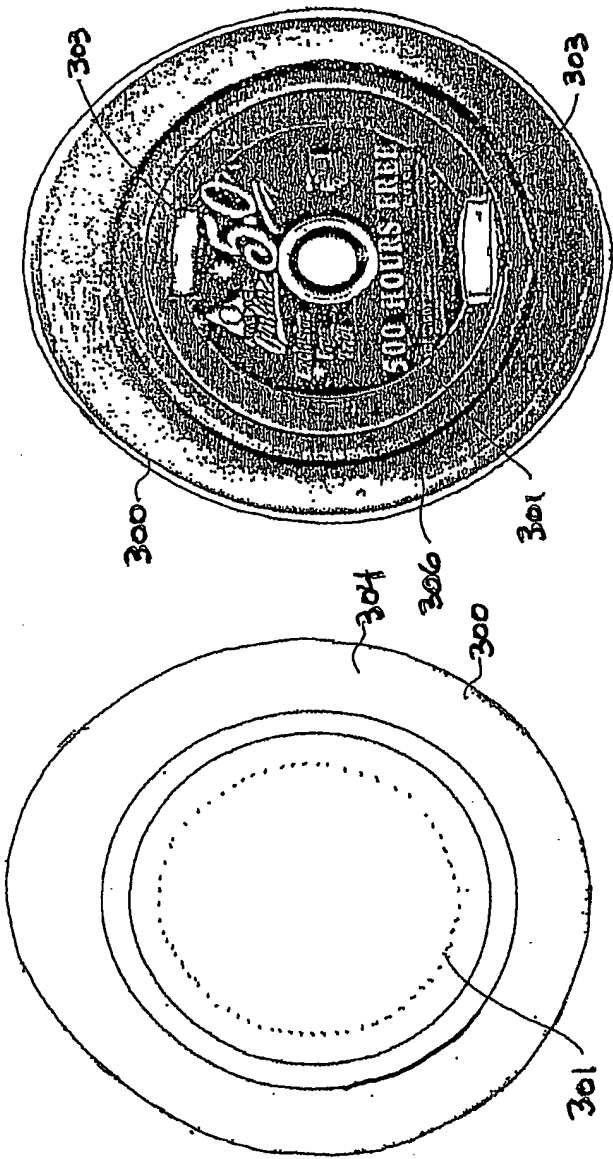


Fig. 19B

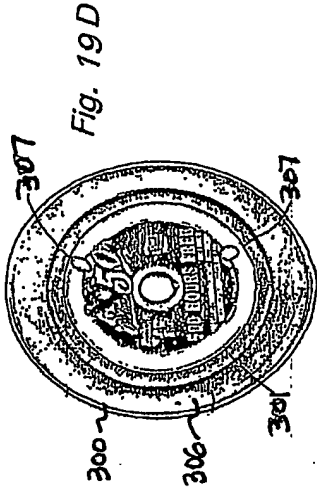


Fig. 19D

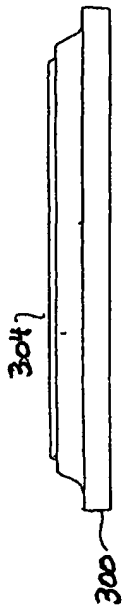
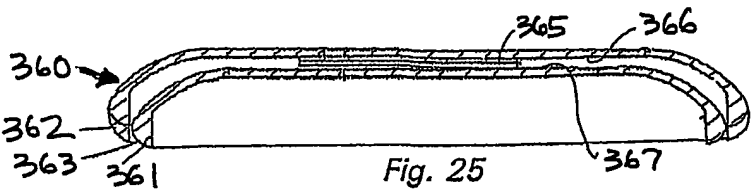
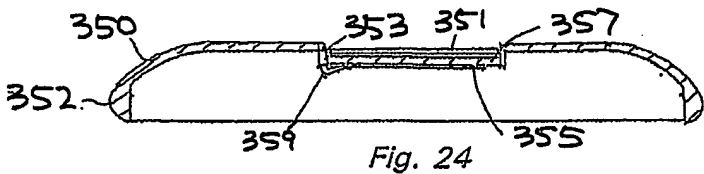
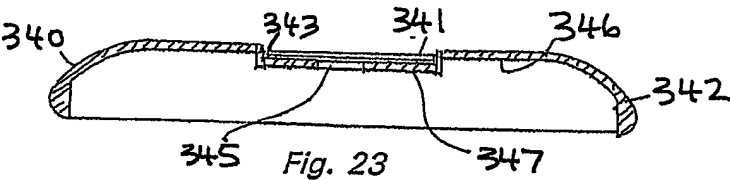
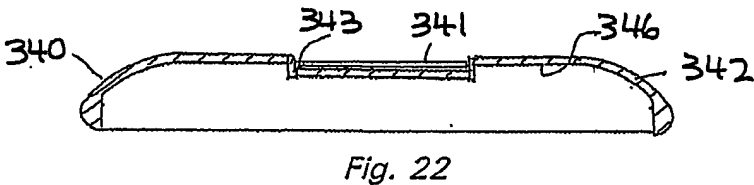
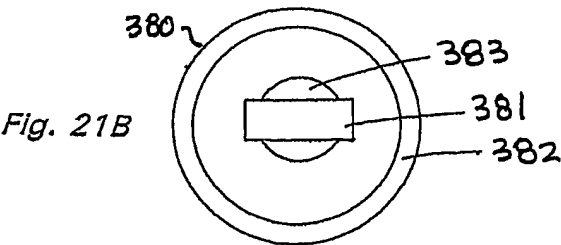
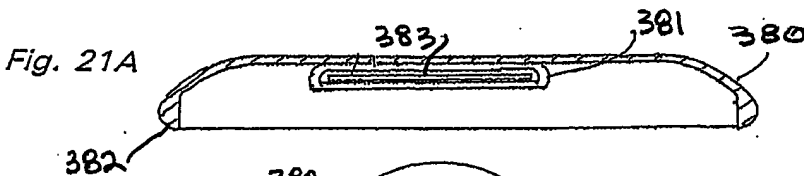
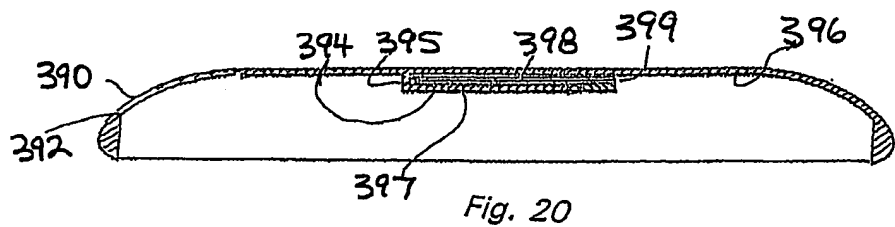
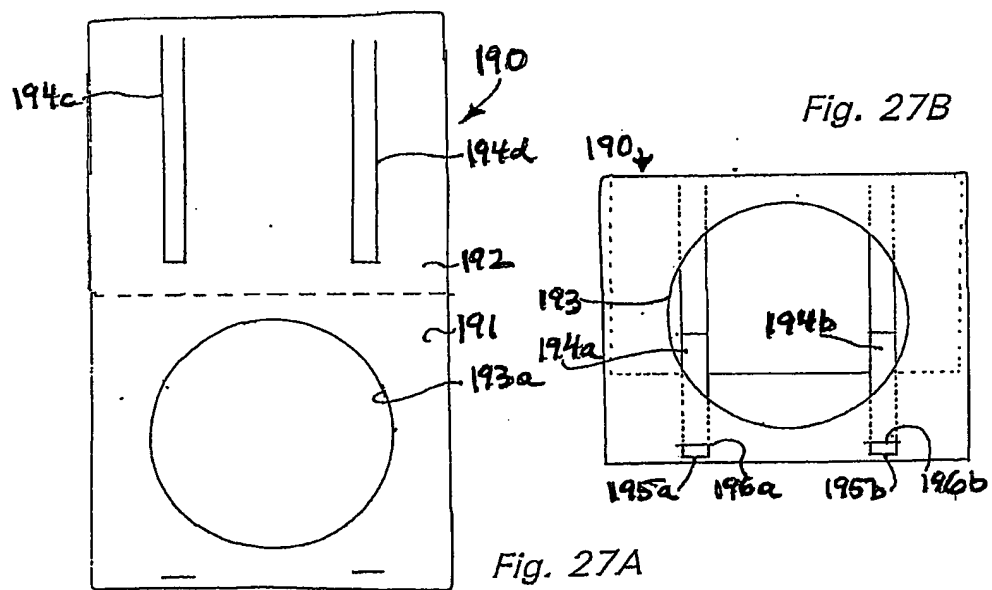
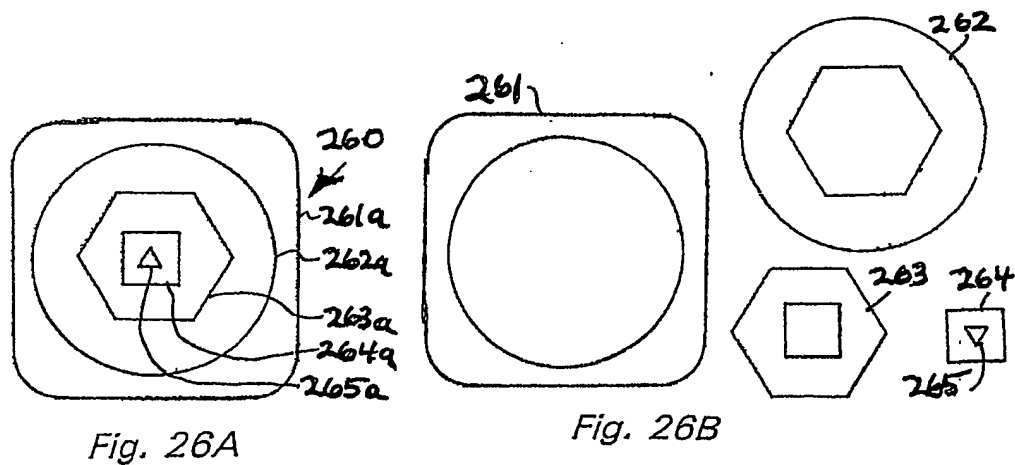
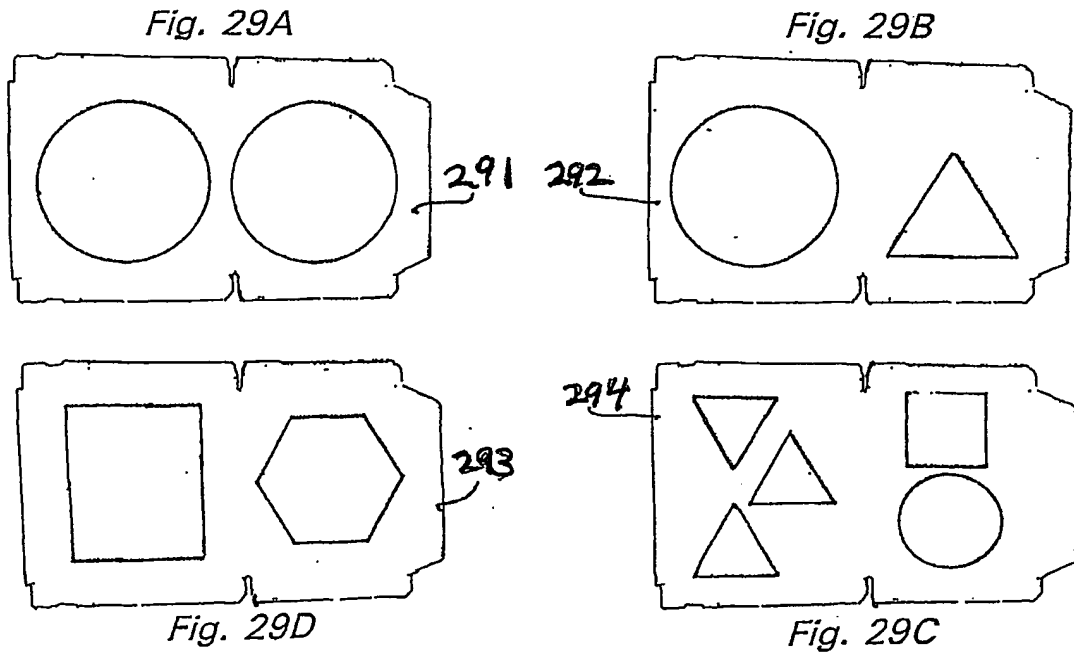
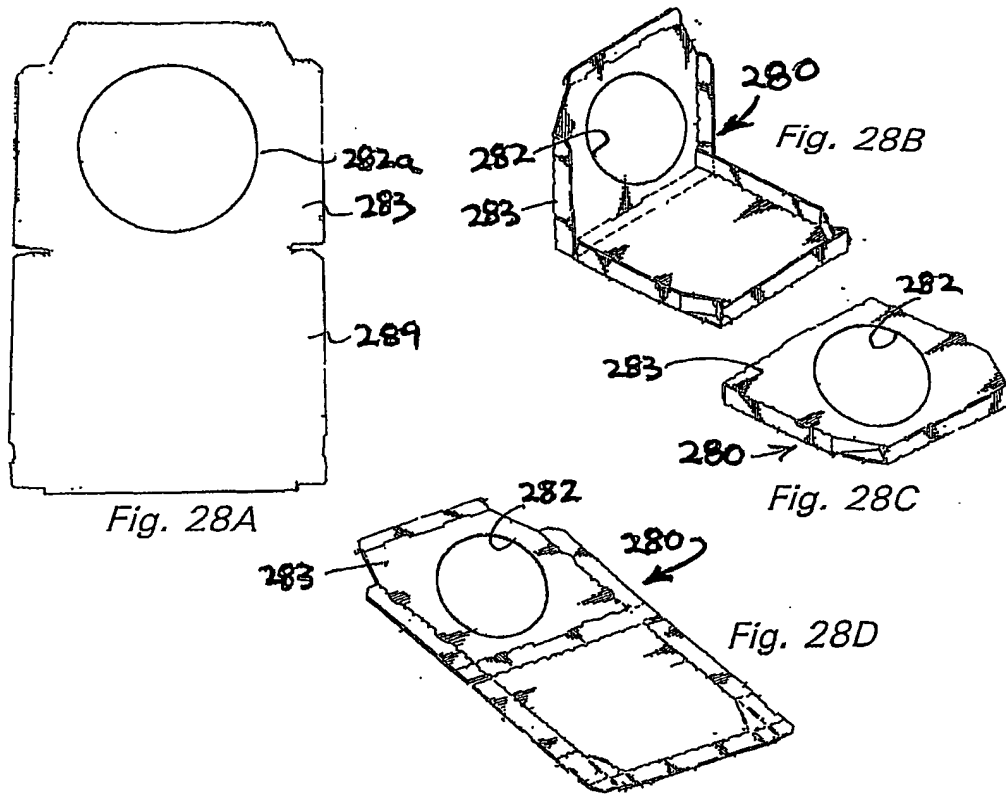
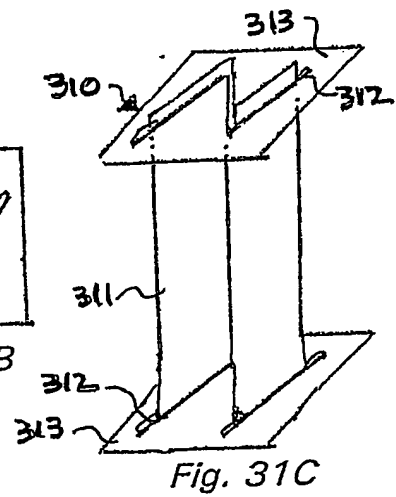
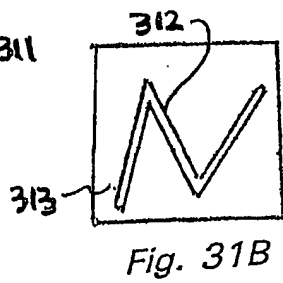
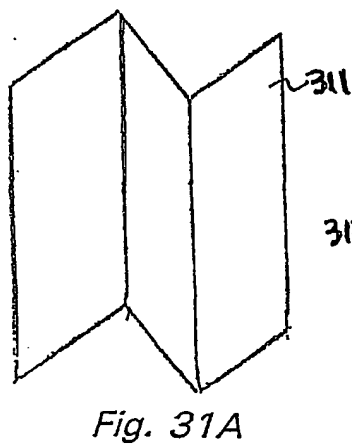
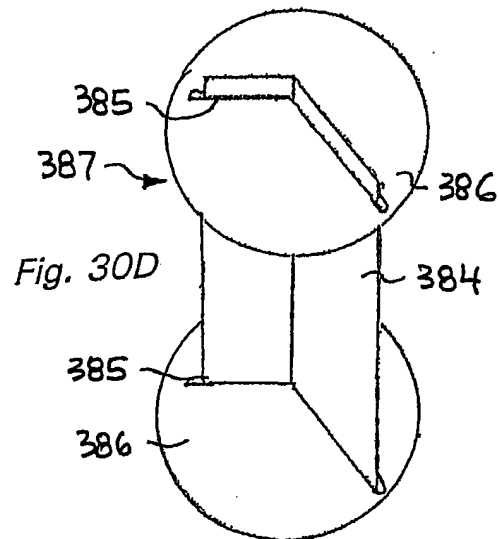
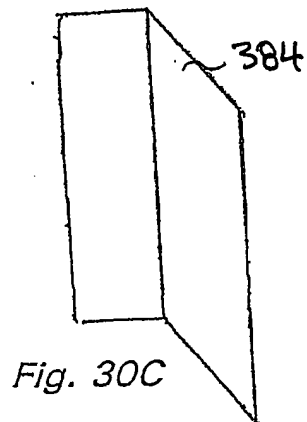
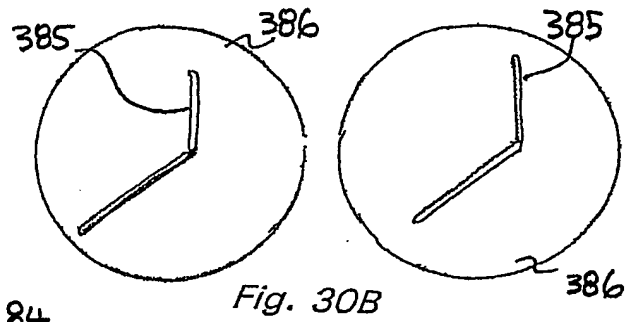
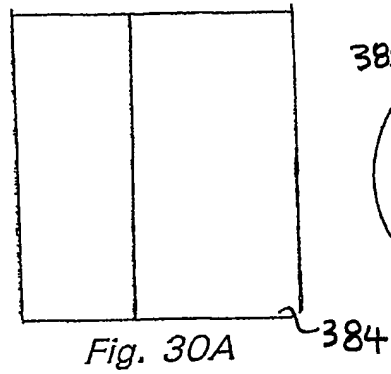


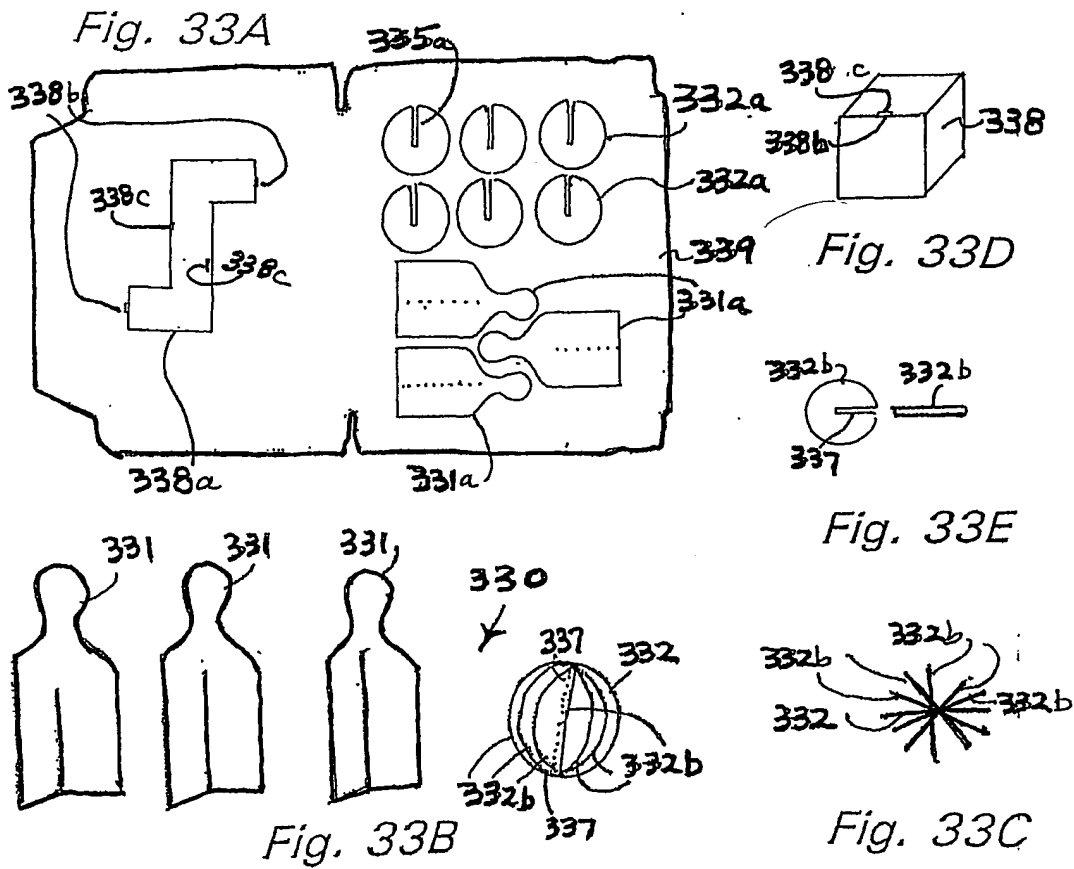
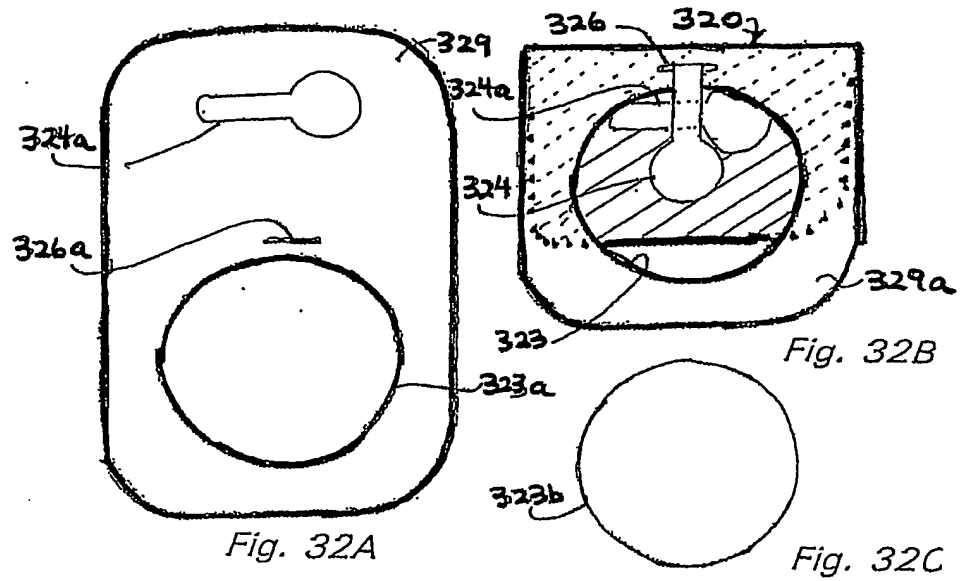
Fig. 19C











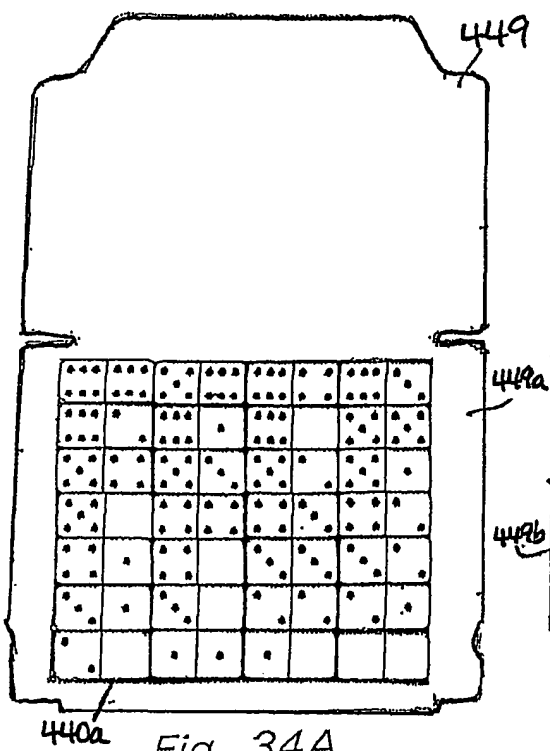


Fig. 34A

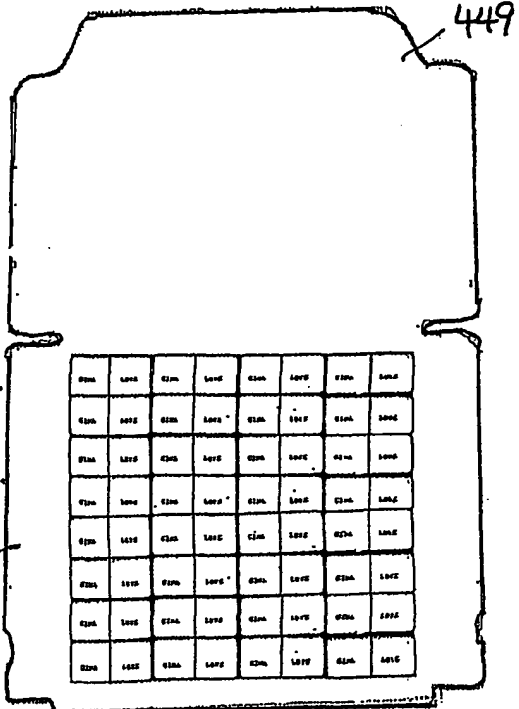


Fig. 34B

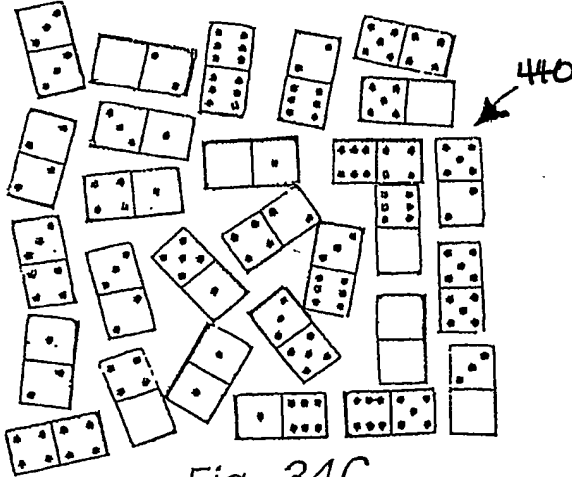


Fig. 34C

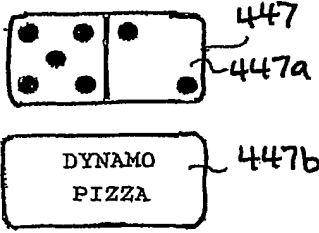
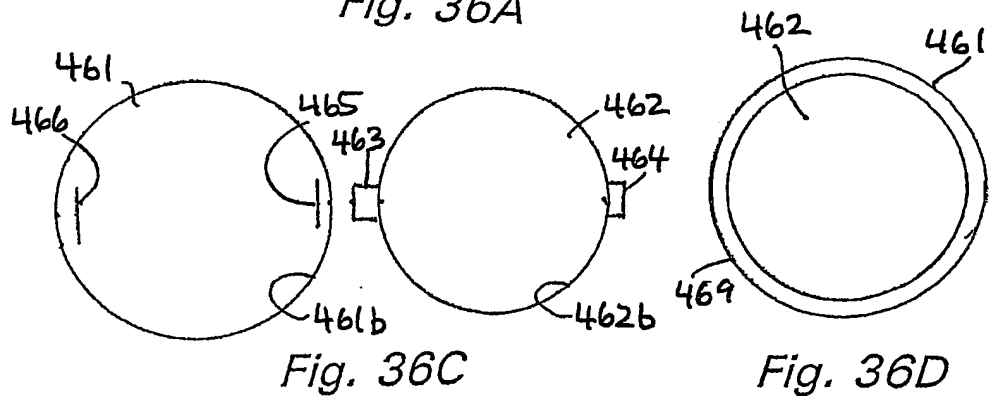
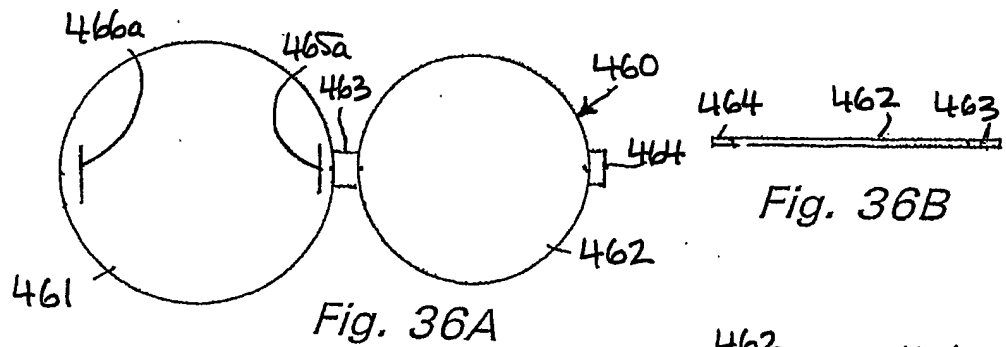
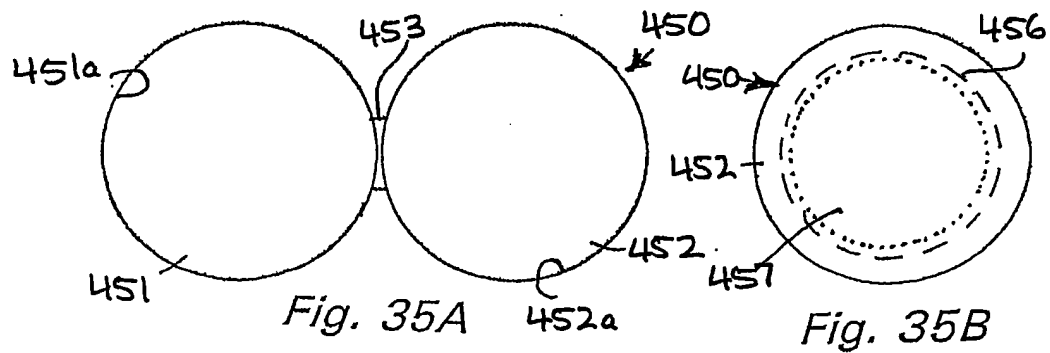
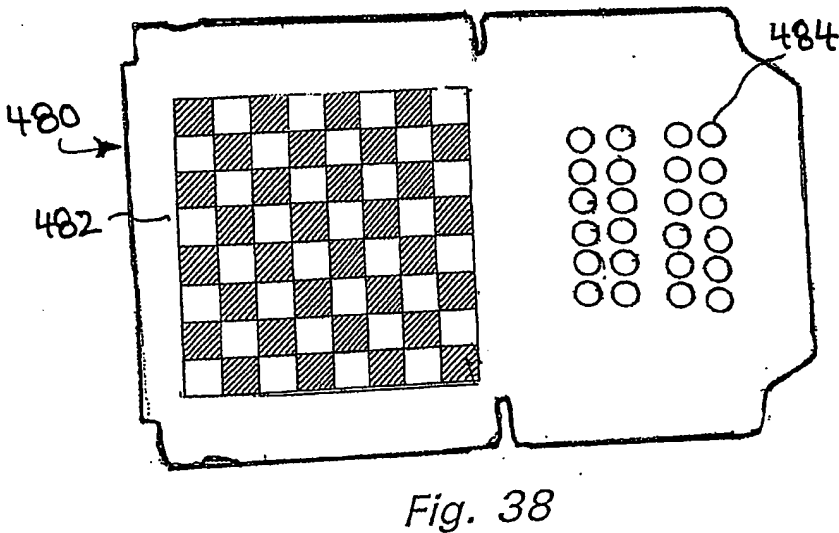
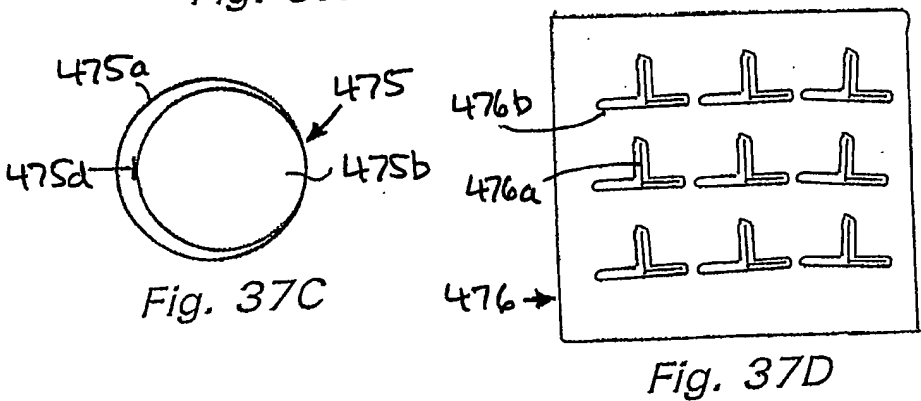
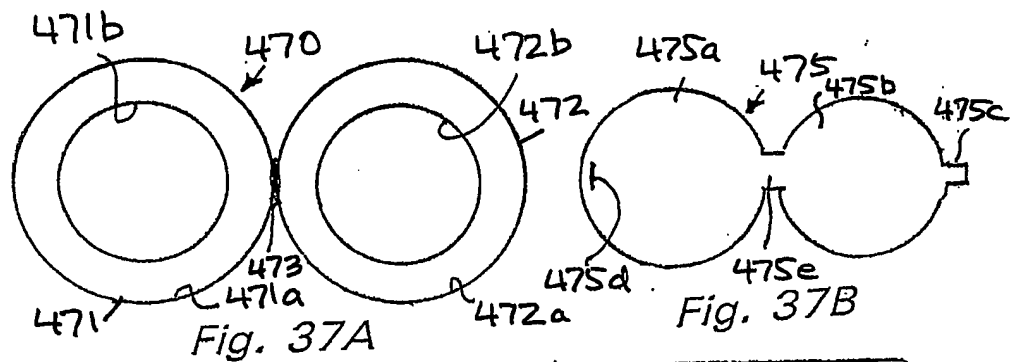


Fig. 34D





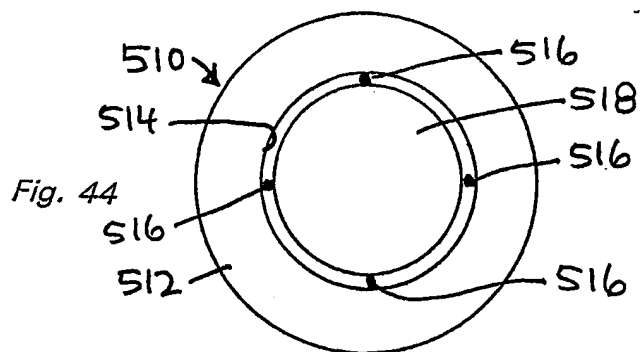
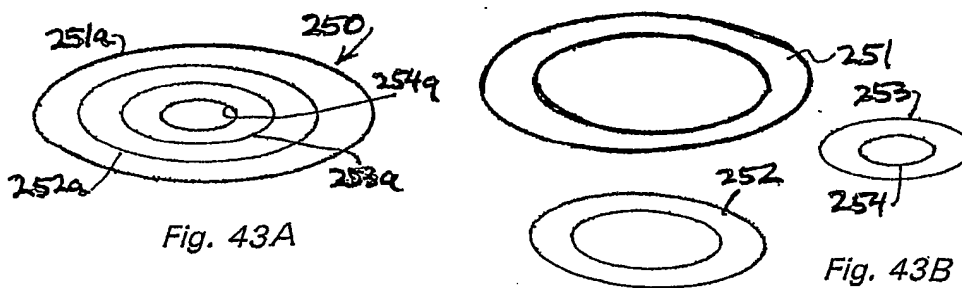
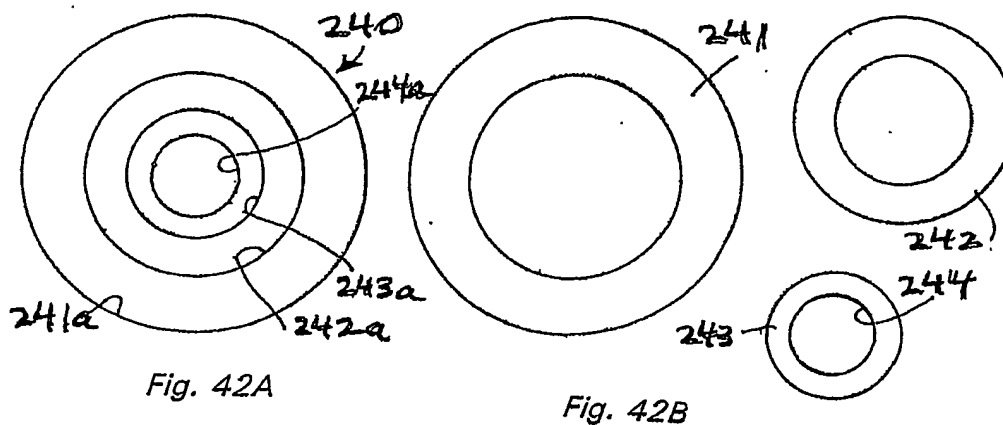


Fig. 45A

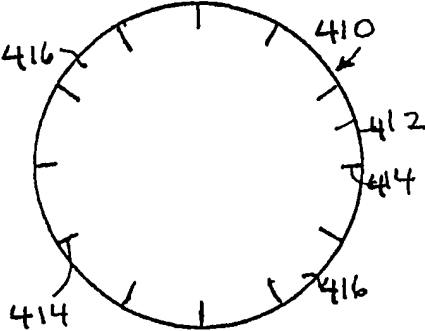


Fig. 45B

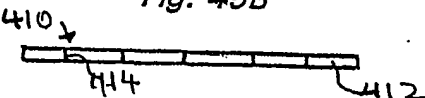


Fig. 45C

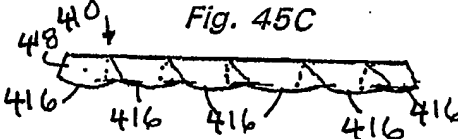


Fig. 46A

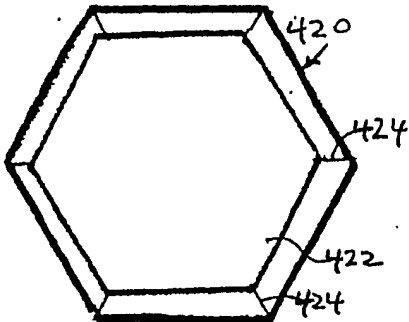


Fig. 46B

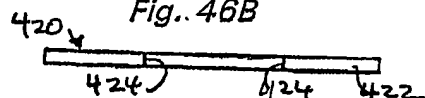


Fig. 46C

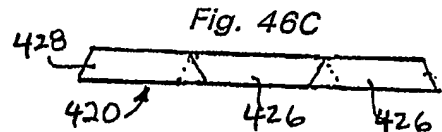


Fig. 47A

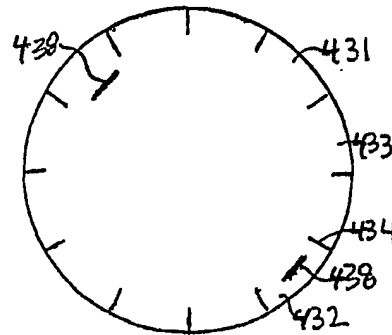


Fig. 47B

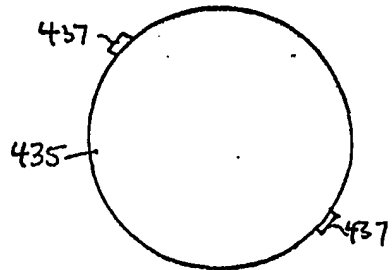
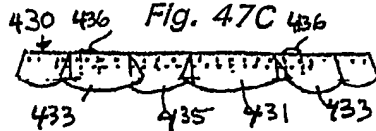
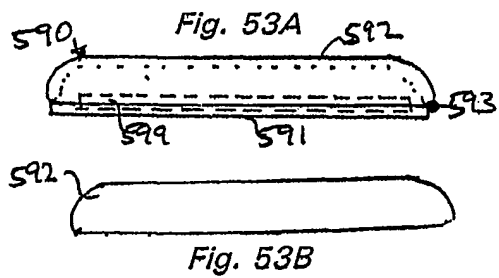
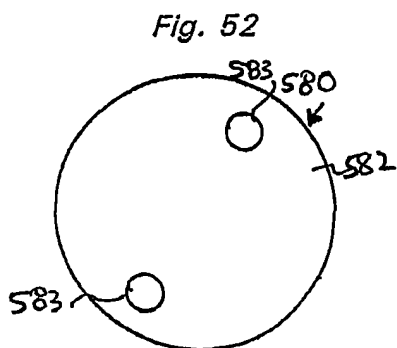
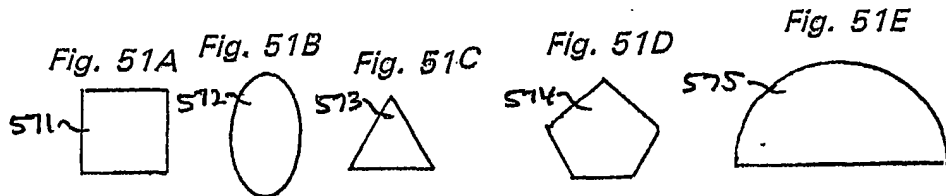
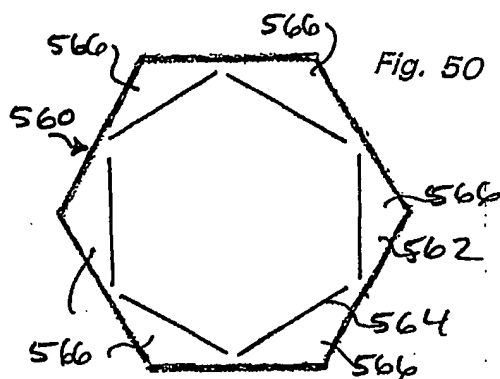
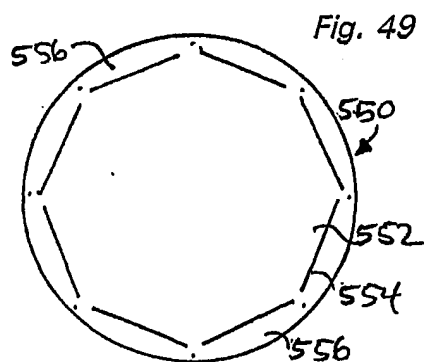
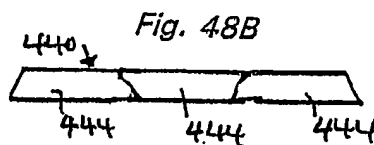
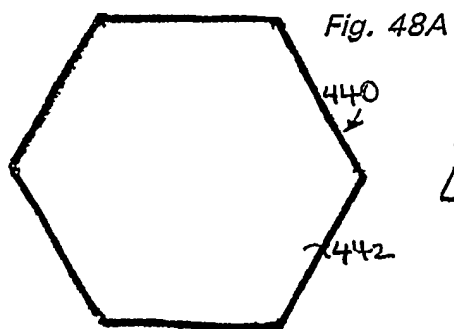


Fig. 47C





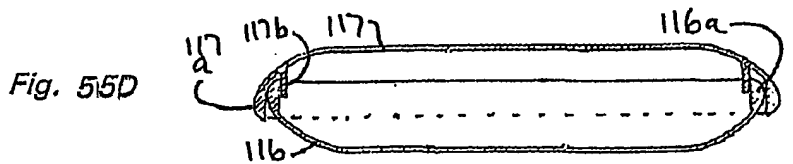
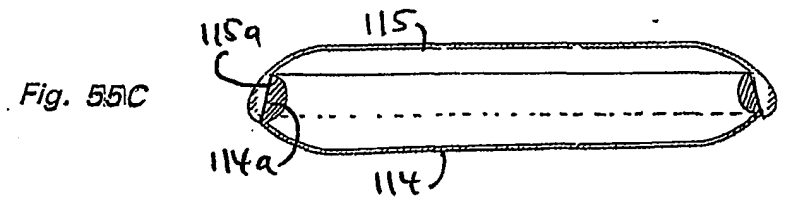
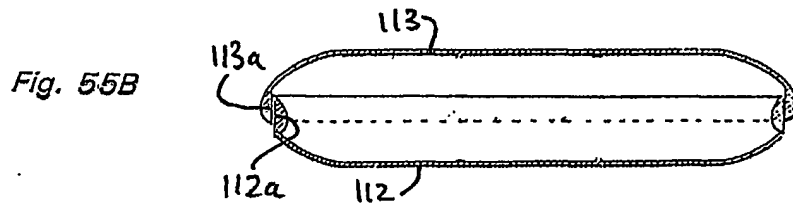
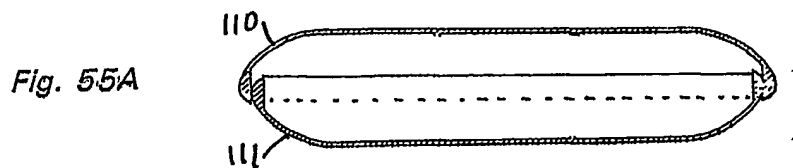
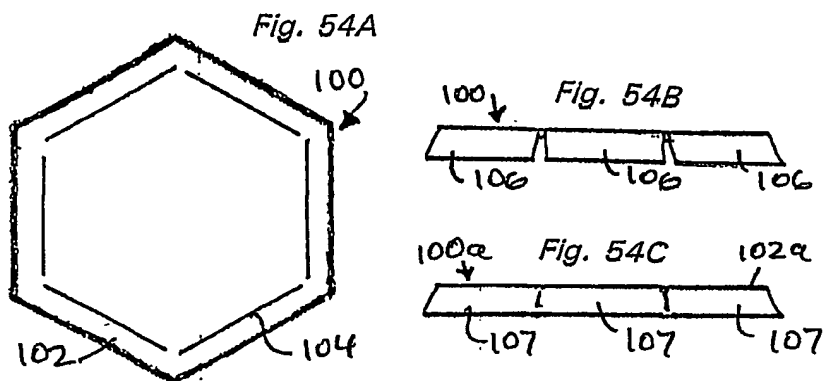


Fig. 56A

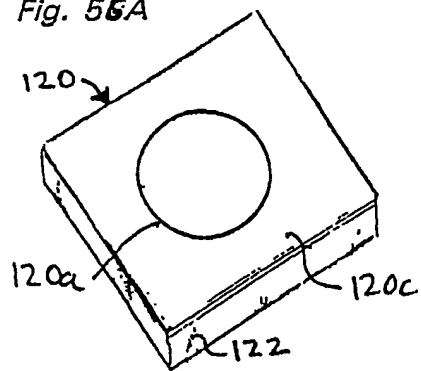


Fig. 56B

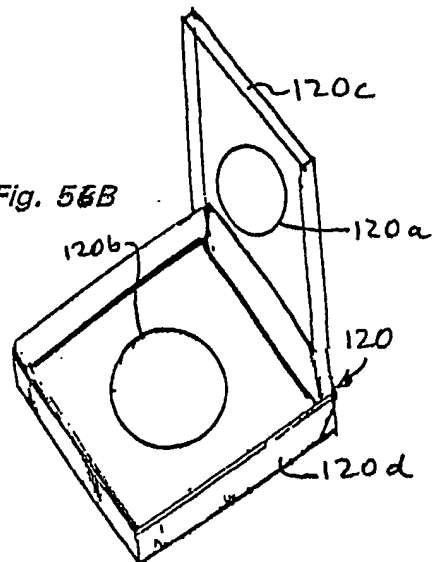


Fig. 56C

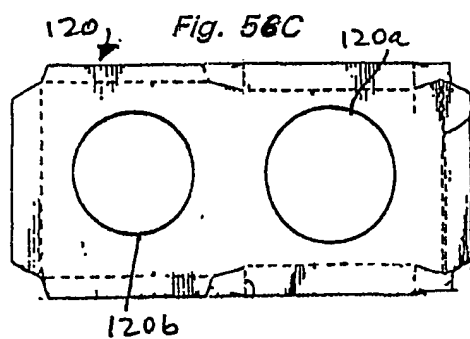
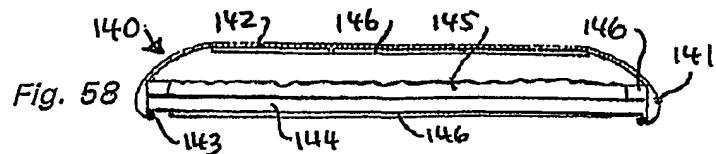
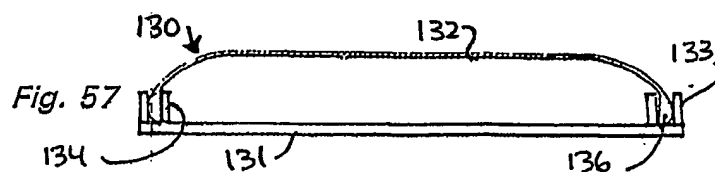
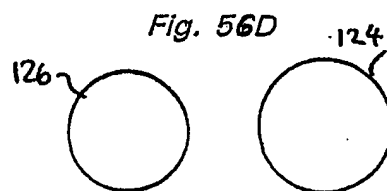


Fig. 56D



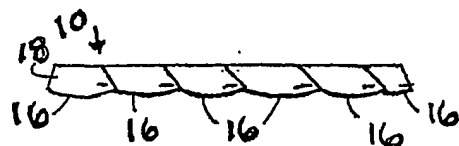


Fig. 59A

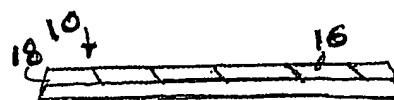


Fig. 59B

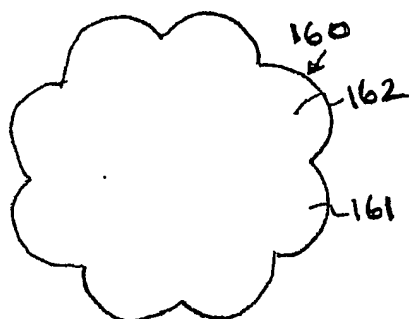


Fig. 60A

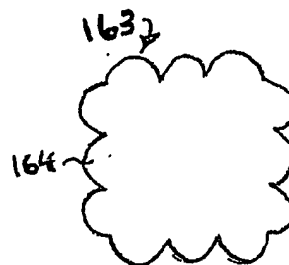


Fig. 60B

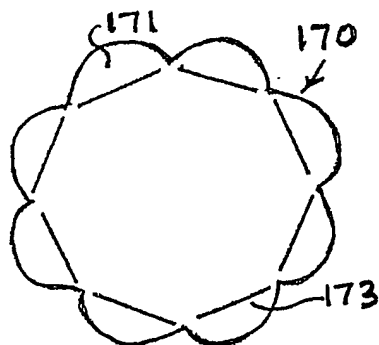


Fig. 61A

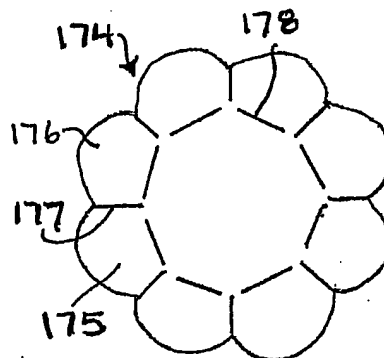


Fig. 61B

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US02/16149

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) :Please See Extra Sheet.

US CL :Please See Extra Sheet.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 206/308.1; 248/346.11; 473/588,569,573,574,470; 273/398,400,401,402,425,426; 446/36,37,38,42,43,44,45,46,47,48

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,480,334 A (WILSON et al) 02 January 1996, see entire document.	1-5
X	US 3,573,869 A (DUCKETT) 06 April 1971, see entire document.	1-5
X	US 4,736,955 A (POLLOCK) 12 April 1988, see entire document.	1-5
Y	US 6,173,957 B1 (JAMES, SR.) 16 January 2001, see entire document.	1-5
Y	US 3,100,642 A (GOLDSTEIN) 13 August 1963, see entire document.	1-5
Y	US 4,203,592 A (QUATKEMEYER) 20 May 1980, see entire document.	1-5

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier document published on or after the international filing date	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"G"	document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means		
"P" document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search

08 AUGUST 2002

Date of mailing of the international search report

06 SEP 2002

Name and mailing address of the ISA/US
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Box PCT
Washington, D.C. 20231

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Authorized officer

JAMILA WILLIAMS

Telephone No. (703) 305-3312

Shelia Veney
Shelia Veney
Paralegal Specialist
Group 3700

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US02/16149

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4,351,129 A (KERKENBUSH et al) 28 September 1982, see entire document.	1-5
A	US 4,940,441 A (NOVINSKY) 10 July 1990, see entire document.	1-5
A	US 4,203,249 A (BOHM) 20 May 1980, see entire document.	6-19
A	GB 2,250,212 A (LEACHMAN) 06 March 1992, see entire document.	6-19
A	US 5,326,299 A (JASINSKI) 05 July 1994, see entire document.	6-19
A	US 5,853,311 A (BARTHOLOMEW) 29 December 1998, see entire document.	6-19
Y	US 5,775,659 A (HARTLAUB et al) 07 July 1998, see entire document.	20
Y	US 5,542,532 A (MITCHELL) 06 August 1996, see entire document.	20
Y	US 6,070,752 A (NAVA et al) 06 June 2000, see entire document.	20

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US02/16149

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

Please See Extra Sheet.

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
☒ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US02/16149

A. CLASSIFICATION OF SUBJECT MATTER:

IPC (7):

A63H 27/00, 27/127; A63B 65/10, 37/00, 37/12, 65/02; A63B 63/00; A47B 91/00; B65D 85/57

A. CLASSIFICATION OF SUBJECT MATTER:

US CL :

206/308.1; 248/346.11; 473/588,569,573,574,470; 273/398,400,401,402,425,426; 446/36,37,38,42,43,44,45,46,47,48

BOX II. OBSERVATIONS WHERE UNITY OF INVENTION WAS LACKING

This ISA found multiple inventions as follows:

This application contains the following inventions or groups of inventions which are not so linked as to form a single inventive concept under PCT Rule 13.1. In order for all inventions to be searched, the appropriate additional search fees must be paid.

Group I, claim(s) 1-5, drawn to a method of engaging in an activity.

Group II, claim(s) 6-19, drawn to a flying disc.

Group III, claim 20, drawn to a flying disc comprising a computer disc.

The inventions listed as Groups I and II do not relate to a single inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The method claims do not require the specifics of the apparatus claims (i.e., "the plurality of portions of the disc body...").

The inventions listed as Groups II and III do not relate to a single inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Group II lacks the special technical feature (i.e., the computer disc) as claimed in Group III.

The inventions listed as Groups I and III do not relate to a single inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The method claims do not require the specifics of the apparatus claims (i.e., "the computer disc...").